COUNTWAY LIBRARY
HC 4N2A P

PARTURITION WITHOUT PAIN

25. B. 41

Digitized by the Internet Archive
in 2025

https://archive.org/details/parturitionwitho0000mlho

PARTURITION

WITHOUT PAIN;

A

CODE OF DIRECTIONS

FOR ESCAPING FROM THE PRIMAL CURSE.

EDITED BY

M. L. HOLBROOK, M.D.,

Editor of the "Herald of Health."

"Neither shall there be any more pain, for the former things are passed away."—Rev. xxi, 4.

FOURTEENTH EDITION. ENLARGED.

NEW YORK:

M. L. HOLBROOK, PUBLISHER,

13 AND 15 LAIGHT ST.

1882.

1604

Entered according to Act of Congress, in the year 1871, by
M. L. HOLBROOK, M D.,
In the Office of the Librarian of Congress, at Washington

PRESERVATION MASTER
AT HARVARD

PREFACE.

ORIGINALITY has not been sought in this little work. All that has been attempted is, to set forth briefly and clearly the nature and importance of childbearing, the slightness of its real dangers, and the best methods of alleviating its discomforts and sufferings.

The subject is itself extensive, and an immense range of related topics have a direct and important bearing on it. The difficulty has accordingly been not to find what to say, but to decide what to omit.

It is believed that a healthful regimen has been described; a constructive, preparatory, and preventive training, rather than a course of remedies, medications, and drugs. The cooling, soothing, and nutritious Fruit Diet system is the central idea of the book, and it is believed that every

recommendation in it is in harmony with that system.

Among the authorities who have been consulted and quoted or used, are the following: Bull, Dewees, Duncan, Gleason, Lozier, Montgomery, Napheys, Pendleton, Shew, Storer, Tilt, and Verdi.

CONTENTS.

CHAPTER I. PAGE

HEALTHFULNESS OF CHILDBEARING..... 7

CHAPTER II.

DANGER OF PREVENTIONS.—CELIBACY BY THE DISEASED..... 14

CHAPTER III.

OPINIONS ON PAINLESS PARTURITION.—CASES..... 21

CHAPTER IV.

PREPARATIONS FOR MOTHERHOOD..... 27

CHAPTER V.

EXERCISE AND OCCUPATION DURING GESTATION..... 37

CHAPTER VI.

THE BATH; ESPECIALLY THE SITZ-BATH..... 44

CHAPTER VII.

PAINLESS PARTURITION FROM FRUIT DIET.—FOOD GENERALLY..... 49

CHAPTER VIII. PAGE

THE MIND DURING PREGNANCY. — "LONGINGS."— "MOTHER'S MARKS" 66

CHAPTER IX.

THE AILMENTS OF PREGNANCY AND THEIR TREATMENT 79

CHAPTER X.

ANÆSTHETICS DURING LABOR.—FEMALE PHYSICIANS. 91

SUMMARY 96

APPENDIX.

THE HUSBAND'S DUTY—BEST AGE FOR PROCREATION—SHALL SICKLY PEOPLE RAISE CHILDREN? — SMALL FAMILIES — IMPORTANCE OF PHYSIOLOGICAL ADAPTATION — CELIBACY — TOBACCO AND ALCOHOL — DETERMINING THE SEX OF CHILDREN—FATHER'S *vs.* MOTHER'S INFLUENCE —SHALL PREGNANT WOMEN WORK?—INTELLECTUAL ACTIVITY AND PARENTAGE — MRS. STANTON'S TESTIMONY 99 113

PARTURITION WITHOUT PAIN.

CHAPTER I.

HEALTHFULNESS OF CHILD-BEARING.

CHILDREN are a good and not an evil. A human being who is not to some extent fond of children, who does not to some extent desire to have children, is defective—maimed; just as a person is who is unable to take pleasure in music, or who is incapable of distinguishing between right and wrong, or who cannot feel sympathy with the pleasure or pain of other people.

Accordingly, the cases of men, and still more of women, who do not desire children, are comparatively few, and are exceptions. They have always been, and still are, recognized as unfortunate instances of sickly or deformed natural constitution, or of the harmful influence of unhealthy social conditions.

The whole range of history, the whole range of to-day's unperverted human nature, show a pro

found love for offspring in the human race. A long series of cases might be cited, it is true, where infanticide has been practised. Yet the number, though great in itself, shrinks out of sight in comparison with the number of cases where it has not been practised. And, furthermore, it would be easy to show that this seeming ferocity is very often the perverted or rather inverted manifestation of the natural affection itself. That is, for instance, vast numbers of the infanticides practised by heathens upon their female children are perpetrated on the theory—either conscious or implied—that it is a kindness to put the little unfortunate things quickly out of a world where they have only unhappiness and servitude to expect.

Except such violations of natural law as this, it will be found that no more powerful motives, unless it be the instinct of preserving one's own life, shape the lives and govern the conduct of human beings than those which impel us to have children. Dr. S. G. Howe, the eminent physician and philanthropist, places but one motive above that of desire for reproducing our species in point of power over human beings. He says, in a discussion upon the treatment of feminine wrong-doers: "As with the FIRST great instinct of nature—to support and prolong our individual life at whatever cost to others,—even so with the SECOND, which leads us to

renew and extend our existence by transmitting it to others."

The Bible, unerringly true in its psychology, is full of this motive. It may even be said that the powerful protection of this profound instinct was used by the Almighty as the impregnable hiding-place in which the plan of human redemption was slowly evolved and human thought habituated to it. Every thoughtful student of Bible psychology will perceive that the two inseparable motives—love of offspring, and hope of motherhood of the Messiah—lay in the very heart of hearts of the Jewish national life.

But the point needs no argument. Few indeed are those who will seriously deny that children are a source of happiness. Helpless as an infant is, troublesome as are the fantastic tricks and naughtinesses of childhood, painful as are parental anxieties over the critical eras of youth,—in spite of all, a home without children is inexpressibly dreary; a heart without children is sad and lonesome beyond expression; a life without children is felt by one of the deepest of instincts to be an imperfect life, shorn of one of the broadest and most vital and vivid portions of emotion and enjoyment.

The money value of a child has been calculated by one philosophical observer. He concludes, in a manner that reminds one somewhat of a slave-trader's computations, that on an average, a healthy

boy, fifteen years old, is equivalent to fifteen hundred dollars cash. This is no doubt a sum not to be despised. But it becomes invisible when we compare it with an estimate of the affectional, social, and ethical value of children. The exercise of so much patience, forbearance, kindness, and love, as their training requires, reacts with infinite power upon the heart of the parent. Constant thoughtfulness, prudence, foresight, and contrivance are indispensable in managing them; and this discipline in like manner reacts upon the character of the manager. The future of children is one of the most powerful considerations in restraining parents from carelessness or indiscretion in economical matters, in their ordinary walk and conversation, in the whole conduct of life. Many a man or woman has been held back from folly or from shame by the recollection of what the children would know of it, or would hear of it.

In truth, the whole fabric of society is keyed upon these feeblest and most imperfect of its members. Remove their influences, and the chief bond of matrimony disappears; and with it disappear the home, the family, and a whole vast circle of forces indispensable to individual self-control, to general morality, to the very existence of society and of nations. The individual, thus loosed, stands without ties to any of his kind, without recollections of ancestors, responsibilities to his fellows, or

expectations toward a future generation. Our civilized and organized frame of society, a body instinct with healthy life, would drop at once into a mere collection of ultimate atoms, by putrid decomposition.

Truths inosculate. It is in accordance with what has been said of the inestimable importance of children in society and as instruments for the development of character, that the office of bearing children should be not merely a natural but a positively healthful office.

As in all other respects whatever, a compliance with the natural laws of human existence in this particular, promotes the total significance—*i. e.*, the extent, the efficiency, the enjoyableness—of that existence. To suppose the case otherwise is to suppose the Creator other than wise. But it is an old paradox, that it is an absurdity which is the "thing impossible to God."

No doubt there are exceptions to the rule. But unless there are special reasons to the contrary, married persons live longer than unmarried; and as a general rule it is absolutely true that long life is happy life. This is the case with both men and women; and writers on longevity accordingly habitually prescribe matrimony as one important means. But the mother's office in the production of offspring is beyond all comparison a greater element in her life—it occupies an infinitely greater

proportion of her time, her head, her heart, her physical strength and vitality, than in the case of the father. And as might be supposed, the influence of marriage and child-bearing upon the duration of women's lives is decidedly more distinct and easy to determine than the influence of marriage and paternity upon men.

Among the numerous elaborate statistical tables which have been prepared during the last half century, are many which show that of the women who die between the ages of twenty and forty-five, more are single than married. History affords no instance of a single woman who has lived to a remarkably great age. Of women who commit suicide, from two-thirds to three-fourths are single. Of women confined in lunatic asylums, from three-fourths to four-fifths are single. There is a startling list of diseases which either actually originate from celibacy strictly observed by persons possessing the average qualities of humanity, or which are very greatly developed and intensified by it. The proverbial eccentricities of "old maids" are no mere imaginations. They are neither more nor less than the unavoidable consequences of an unnatural way of living. So immediate and important is the influence of celibacy or marriage on health, that we find medical authorities of the highest rank treating it as a matter of hygienic importance as obvious and as weighty as food or exercise

or climate. Thus the great French physician Pinel says that medicine is helpless in cases where "the immutable necessities of fecundity and reproduction are perverted. When therefore a young marriageable maiden exhibits symptoms of the approach of *any disease*, she should if possible be united to the object of her affections." And the physician who quotes this language adds, "this treatment has often proved very successful in averting diseases that would have rendered her life one of misery."

Thus it appears that the process of child-bearing is essentially necessary to the physical health and long life, the mental happiness, the development of the affections and whole character of women individually (of men also), and to the very existence, not only of the human race, but of civilized society.

CHAPTER II.

DANGER OF PREVENTIONS.

In like manner as it was shown that the healthfulness of child-bearing accords with natural indications, so does the doctrine that frustrations of child-bearing are unhealthful, accord with the same indications. The invasion and devastation of a great province of life cannot but weaken the whole. The function of child-bearing diverts to its purposes and absorbs in its offices such a vast share of the physical frame, of the blood, of the nervous system, of the whole vitality of the mother, that to meddle with it meddles with her very existence.

The vast importance of the maternal office is strikingly shown in estimates of the influence of the female reproductive system upon the whole life which have been made by distinguished medical writers. "*Propter uterum est mulier*," asserts one of them—"Woman exists for the sake of the womb." And Professor Hubbard, of New Haven, in an annual discourse before a medical society during 1870, spoke as follows: "The sympathies of the uterus with every other part of the female

organism are so evident, and the sympathetic relations of all the organs of woman with the uterus are so numerous and complicated, so intimate and often so distant, yet pervading her entire being, that it would almost seem, to use the expression of another, 'as if the Almighty, in creating the female sex, *had taken the uterus and built up a woman around it.*'" And again, he calls this organ "the great central *pivotal* organ of her existence."

Even when brought on without special violence —even when merely resulting from general or local imperfections previously existing, miscarriages are recognized as perilous to an exceptional and even mysterious degree. All the standard writers on the subject are as strenuous as language will permit, in their warnings against causing miscarriages, in requiring the extremest delicacy of precaution for avoiding them, and in depicting not only their temporary and immediate consequences, but the terrible danger that they will cause the utter ruin of all health and happiness during whatever is left of life. Thus, Dr. Thomas Bull observes: "There is no accident befalling female health which forms a greater source of dread, anxiety, and subsequent regret to a married woman than miscarriage. When this occurrence becomes habitual, there is no circumstance the consequences of which are productive of more serious injury to the constitution, blasting the fairest promises of

health, and ofttimes laying the first seeds of fatal disease."

This intrinsic danger is frightfully increased when drugs or violence are used in order to break up the natural course of gestation by the destruction of the unborn child. Much attention has, especially of late years, been called to the wide prevalence of such practices, and the assertion has been extensively and often made that American women are peculiarly addicted to it, and those of New England more than any other. Whatever may be the exact statistics of the subject, and while the practice itself is as bad as it can be called, yet it is extremely probable that in this case, as in many others, publicity and prevalence are confounded. No evil can be exposed by thorough local investigation without apparent proof that the locality best investigated was worst conditioned—which is a fallacious mode of reasoning.

However, the practice of deliberately procuring abortions is no doubt quite frequent, awfully dangerous, and awfully wicked. Recent publications on the subject, by Dr. Storer, Dr. Todd, Bishop Coxe, and others, have so powerfully attacked this wicked practice, from physiological, moral, and religious considerations, that no extended discussion of it is necessary here, even did space permit it. A summary of considerations must suffice.

It is hardly necessary to remind the reader that

the common sense of mankind has been expressed in numerous laws inflicting fine, imprisonment, or death, upon the principals and accessories in procuring an abortion, as upon those guilty of a felony. In like manner, a stigma of horror and contempt is always set upon a known abortionist like that which used to brand the slave-trader. If he be a physician, his brethren reject him; if a quack, all society rejects him. Neither hundreds of thousands of dollars, limitless magnificence, a fine house on Fifth Avenue, the possession of the most dangerous secrets, eager ambition, nor unfailing energy, has been able to secure a respectable social position to the best known female abortionist in New York.

For this shame and horror there is overwhelming cause. The procuring of an abortion is putting to death a human being—that is, it is murder,—unless there exist reasons as weighty and as urgent as those which prevent the taking of adult life from being murder.

It is, moreover, self-murder also in many cases. for the number of deaths resulting directly and quickly from it is very great, and still greater is the destruction of life by shortening and sickening the subsequent existence of the mother. "Miscarriages," says Dr. Storer, "are often a thousand-fold more dangerous in their immediate consequences than the average of natural labors. . . . They are not

only frequently much more hazardous to life at the time, but to subsequent health; their results in some instances remaining latent for many years, at times not showing themselves until the so-called turn of life, and then giving rise to uncontrollable and fatal hemorrhage, or to the development of cancer or other incurable disease."

Among the results to the mother other than death, from what may be called natural, still more from artificial miscarriage, are all the numerous and varied miseries of displacement and falling of the womb; leucorrhœa; ovarian disorders, liable to end in tumor or dropsy; dangerous inflammations of the reproductive organs and of others from sympathy with them; fistulæ, perhaps the most horrible of surgical diseases; adhesions, degenerations, and numerous other permanently distressing results of these inflammations; subsequent inability to produce any but sickly or deformed children; total barrenness; and last, but not least, insanity.

Besides that it is murder to the child-victim, frequently suicide, murder, or physiological ruin to the mother, and a felony in all engaged in perpetrating it, the habitual practice of procuring abortions, like the habitual practice of any crime, saps the life and strength of the community, as well as of the individuals who compose it; and Storer aptly quotes from Granville on Sudden Death, the

impressive warning: "Let the legislator and moralist look to it; for as sure as there is in any nation a hidden tampering with infant life, whether frequent or occasional, systematic or accidental, so surely will the chastisement of the Almighty fall upon such a nation."

Both celibacy and frustrated fruitfulness are unnatural and perilous. There are, however, as has been observed, exceptional cases when the enforcement of both one and the other may be justified. There may be cases where a miscarriage ought to be produced, just as there are cases where a living child must be put to death in the very act of delivering the mother. It is, however, the physician's duty to pass and execute such judgments; and he is bound, in doing so, to act from the motives of his profession, and not to consult the patient's fear of shame, nor her desire to avoid the care of maternity. There are cases where peculiarities of organization or disposition indispose or unfit individuals for matrimony; and such persons do rightly to live single. But such cases do not at all interfere with the principles above set forth as generally true.

A more difficult question is that sometimes raised, whether inheritable disease should prevent the person infected with it from marriage? On this point, it is believed that most opinions can be ranked in two groups: one starting from the belief

that the requisite self-denial for such avoidance of marriage is practicable; and the other that it is not. The truth is, that in the present state of our knowledge about the real nature of diseases, and of transmissibility of qualities from parent to offspring, the materials for an authoritative decision of this question do not exist; and no such, applicable to all cases, can be given. At the same time it is clear that to a high-minded person the fact of being tainted with a disorder likely to ruin the health and happiness of offspring would be a very powerful motive for refraining from marriage. And yet, on the other hand, the recuperative energies of the human organism, both individually and as a succession of generations, are so indefinite and so wonderful, that great excuse could be found for almost any one who should marry and have children, notwithstanding such an objection. It is an obvious suggestion, that when persons having inheritable disease become parents, mere justice, as well as natural affection, require that they should bestow special and untiring pains and care to counteract the evil tendency in the children by the healthiest possible training, in order that the natural forces may be helped as far as may be to eject or overcome the malignant influences.

CHAPTER III.

OPINIONS ON PAINLESS CHILDBIRTH.

THE accounts given by travellers of the marvellous ease, quickness, painlessness, and freedom from disablement, with which many savage women bring forth children, are well known. There is great reason for believing that among some savage races neither pregnancy nor labor interrupts the usual avocations and movements of the mother, except, perhaps, for an hour or two at the birth itself. It is not, however, so generally known that the records of medical observations contain accounts of a number of cases of almost equally complete contradictions of what is commonly considered a primal and universal curse upon humanity.

Dr. Tuke, a high authority, says: "Parturition itself, according to the general testimony of travellers, interferes much less, and for a shorter period, with the healthy action of the body and mind among savage nations than among the luxurious daughters of artificial life."

Dr. Dewees, one of the best authorities in obstetrics, has argued in one of his publications, that "*pain in childbirth is a morbid symptom;* that it

is a perversion of nature caused by modes of living not consistent with the most healthy condition of the system; and that such a regimen as should insure such a completely healthy condition might be counted on with certainty to do away with such pain." The account of the Fruit Diet system, given in our subsequent Chapter VII., demonstrates, it is believed, an entire fulfillment of this prediction of the eminent Philadelphia physician.

In like manner we find the great English scientist, Professor Huxley, saying, in his paper on "Emancipation, Black and White," "We are, indeed, fully prepared to believe that the bearing of children may, and ought to become, as free from danger and long disability to the civilized women as it is to the savage."

The following paragraphs, from one of the essays in Dr. Montgomery's classical work on Pregnancy, are interesting as giving circumstantial details of cases in illustration of the belief in the practicability of painless parturition:

"In a letter to me, dated 5th November, 1832, Dr. Douglas states that he was called about six o'clock A.M., on the 26th of September, 1828, to attend Mrs. D., of the county of W——, but then residing in Eccles Street. On his arrival he found the house in the utmost confusion, and was told that the child had been born before the messenger was dispatched for the doctor; and from the lady

herself he learned that, about half an hour previously, she had been awakened from a natural sleep by the alarm of a daughter about five years old, who had slept with her for some nights before, and this alarm had been occasioned by the little girl feeling the movements and hearing the crying of an infant in the bed. To the mother's great surprise, she found that she had brought forth her child without any consciousness of the fact. . . . . In the *London Practice of Midwifery*, a work generally ascribed to a late very distinguished practitioner, we find the following account:

"'A lady in great respectability, the wife of a peer of the realm, was actually delivered once in her sleep: she immediately awaked her husband, being a little alarmed at finding one more in bed than was before.' . . . .

"I have elsewhere mentioned the case of a patient of mine who bore eight children without ever having labor pain; and her deliveries were so sudden and void of sensible effort, that in more than one instance they took place under most awkward circumstances, but without any suffering. . . . . Dr. Wharrie relates the case of a primipara (*i. e.*, a woman bearing children for the first time), aged twenty-one, who had been in labor about six hours; she complained of no pain, and the child was born without effort or consciousness."

A case is known of a lady in New England who

had five children, and who, unless at her first delivery, experienced no pain; and another case is known of a lady whose reputation is high as a writer and speaker, who asserted that it was her own experience that the so-called pains of childbirth were no more entitled to the name than the sensations attendant upon other natural processes which are ordinarily entirely painless.

All these cases, it should be noted, were of women in good health; and the two latter, at any rate, were persons of exceptionally fine and strong constitutions. In like manner, those women of savage nations who bear children without pain, live much in the open air, take much exercise, and are physically active and healthy to a degree greatly beyond their more civilized sisters.

These instances tend directly to prove that parturition is likely to be painless in proportion as the mother is physically perfect and in a perfect condition of health. They certainly tend even more strongly to prove that pain is not an absolutely necessary attendant of parturition.

As for the announcement of Genesis iii. 16, "In sorrow thou shalt bring forth children," it may judiciously be compared with the accompanying announcement to the man that he should earn his bread by the sweat of his brow. This latter does not prohibit the ameliorations of associated effort, or of labor-saving machinery; not even if at some

future time these should, as seems not improbable, elevate mankind above the necessity of yielding the greater part of life to mere drudgery. Nor does the former prediction prohibit the use of means to diminish the suffering which it foretells. It would be a wicked misrepresentation of the Almighty, indeed, to assert that in prophesying evil, he had meant to refuse escape from it. God is good, and does not do so. If he prophesies evil, it is not in order to perpetuate it, but if possible to prevent or cure it. Indeed, the language may properly be considered as a prediction merely. As such it has already been abundantly fulfilled. There has been suffering enough in childbirth to satisfy, not merely a God, but a devil. There is enough within every day that passes over our heads. For the great majority of women in civilized nations, parturition is a period of intense pain. Doubtless the total of its sufferings are the greatest single item of every-day human misery. Dr. Storer says: "There is probably no suffering ever experienced which will compare, in proportion to its extent in time, with the throes of parturition." And he quotes from Dr. Meigs, who says: "Men cannot suffer the same pain as women. What do you call the pains of parturition? There is no name for them but Agony."

The course of modern scientific investigation, however, has gone far to justify a belief that this

terrific burden upon humanity can be almost entirely removed; that the pain of parturition can be as completely done away with as the danger and disfigurement of small-pox, for instance. It is the object of the following chapters to set forth briefly the substance of the best principles and rules that have been arrived at for this purpose, up to the present time.

At the same time, this immeasurable benefit to humanity cannot be obtained without the proper use of means, and the continuance of such use for a considerable period. The doctrines of the ablest thinkers on the subject, will be found to agree in this; that it is the previous life of the mother—*the whole of it*, from her own birth to the birth of her child—which almost entirely determines what her danger, her difficulty, and her pain during childbirth shall be. Her easy or difficult labor, in fact, is almost entirely her own work. Her conduct during gestation, it is true, is more immediately influential in the decision than that of remoter periods, and is or may be greatly more influential upon the future life of her offspring than even upon herself. But the suggestions to be given in these pages about the *whole* previous life of the mother, although at first they may seem too indirectly concerned with the subject, are not so by any means.

CHAPTER IV.

PREPARATION FOR MATERNITY.

It is not too much to say that the life of women before marriage ought to be adjusted with more reference to their duties as mothers than to any other one earthly object. It is the continuance of the race which is the chief purpose of marriage. The passion of amativeness is probably, on the whole, the most powerful of all human impulses. Its purpose, however, is rather to subserve the object of continuing the species, than merely its own gratification.

As, however, this little treatise does not discuss either physiology, hygiene, education, or social ethics, what is to be said on the general subject of this chapter is only a series of reminders or hints, each of them meant to be reinforced by a special reference to their importance in the preparation for maternity.

The mother needs to be strong, healthy, sensible, well-informed, well-mannered, refined, accomplished, kind, pure, and good. The girl, accordingly, needs to be brought up to be such.

Girls should be brought up to live much in the

open air, always with abundant clothing against wet and cold. They should be encouraged to take much active exercise; as much, if they want to, as boys. It is as good for little girls to run and jump, to ramble in the woods, to go boating, to ride and drive, to play and "have fun" generally, as for little boys.

All their physiological and hygienic habits should be watched and formed as early in life as possible. It is next to impossible to change after adult years are reached; it only requires steady care to form the habits of a child so that they shall need no change.

Sleep should be regular and plentiful; in airy rooms; at early hours; each child in a separate bed. After-life will afford all that is necessary in the way of late hours, bad air, and broken rest. As for habitually sleeping two in a bed, while no absolute rule can be laid down on the subject, it is coming to be believed by many sensible thinkers, that even among married people it is by no means always the most healthful practice

Children should be carefully prevented from using their eyes to read or write, or in any equivalent exertion, either before breakfast, by dim daylight, or by artificial light. Even school studies should usually be such that they can be dealt with by daylight. Lessons that cannot be learned without lamp-light study are almost certainly excessive

This precaution should ordinarily be maintained until the age of puberty is reached. When the girl begins to study with the sense of a self-conducting intellect, she has reached an age when her physical as well as mental training should by right be intrusted as far as possible to her own guidance; and she must, in a great measure, take charge of her own eyes as well as her own thoughts and conduct.

The food should be healthful, plain, cooked with as much care as if the process were chemical, and almost always nutritious merely, and cooling, rather than stimulant, in quality. Coffee and tea, alcoholic fluids and spices, rich cake and pastry, had better be put off until adult age. If they are used then, it is on the recipient's own responsibility. Abundance of luxuries for the palate may be allowed not only without harm but with advantage, by selecting among good fresh and preserved fruits and nuts; by choosing confectionery made only of clean good sugar and clean good flavors, *and by giving it exclusively as a dessert*, in moderate quantities. Thus associated with other food, it will be found as harmless as the brown sugar or molasses eaten with buckwheat cakes.

Bathing should be enforced according to constitutions, not by an invariable rule, except the invariable rule of keeping clean. Not necessarily every day, nor necessarily in cold water · though

those conditions are doubtless often right in case of abundant physical health and strength.

The teeth should be closely watched, and the irksome task of brushing them should be personally supervised by the parent every day. It will often be the case that no less watchfulness than this will assure the performance of the duty up to the time when the girl begins to care for her own personal attractions.

The habit of daily natural evacuations should be solicitously formed and maintained. Words or figures could never express the discomforts and wretchedness which wrong habits in this particular have locked down upon innumerable women for years and even for life.

Attitude should be regarded, so far as not merely to cultivate habitually decorous manners in sitting and moving, but as to firmly establish habitually healthy postures of body. It is seldom necessary to use such deformity-cures as back-boards, braces, etc. They usually follow upon previous neglect. Few, indeed, are the girls who, if brought up with sufficient open-air exercise, good food, proper sleep, healthful costume, and correct hygienic habits, will poke out their chins, round their shoulders, or develop a curvature of the spine. As in mind, so in body—human beings are a pretty fair average, after all, if we let nature have a fair chance.

Dress should be warm, loose, comely, and modest rather than showy; but it should be good enough to satisfy a child's desires after a good appearance, if they are reasonable. Children, indeed, should have all their reasonable desires granted as far as possible; for nothing makes them reasonable so rapidly and so surely as to treat them reasonably.

The requisites just named for children's dress are quite as important during youth and married life. Dr. Verdi, in his work on Maternity, traces in a very striking way the influence of dress upon the children of the *next* generation. What he says exhibits the following chain of causes and effects, and is worthy to be set forth in whole discourses and volumes by itself, though it must here be compressed—like a misdressed young lady—perhaps too much for the greatest utility. It is thus:

Children and young persons should be dressed with equal warmth throughout, so that shoulders, arms, lower body, legs, and feet shall be as well defended against cold and wet as the body from waist to shoulders. That exposure of legs and lower body, which is so extremely common for children, chills the skin. This clogs and impedes the circulation, and especially drives away the blood from the abdomen. This obstructs digestion, even causes the bowels to almost cease their functions, and causes a habitually constipated condition. This condition is one of the most usual curses of

subsequent displacements of the womb, leucorrhœa, ulceration, and other local disorders extremely painful and wearing. These, lastly, are well-nigh fatal to the prospect of healthy children, and in many cases leave the mother who has grown up thus disordered actually incapable of carrying a child to full term, and condemned to miscarriages at the sixth or eighth week, with all their miserable concomitants.

At school, girls should not be forced to excessive study. Great harm is every year done in such forcing-houses as Miss Mary Lyon's famous school, and even in such comparatively low-pressure machines as Vassar College, by over-stimulation of girls' minds and deficient hygienic physical training, exactly at the delicate, critical period when they are changing from girls to women. The proportion between book-work and mental labor on one hand, and physical training on the other, should be so adjusted, that if either mental or physical progress must be temporarily neglected, *it shall not be the latter;* for at the school-girl age, a few months of ill-health or neglected symptoms may seriously compromise all the rest of life, and life's happiness. This consideration is of greater importance than a hundred years of "schooling."

The young lady period—as perhaps that season may be called between the close of school years and the time of marriage—has also its peculiar

needs. However, what has been said of young girls is true, with the requisite qualifications, of marriageable maidens also. They must be allowed more elaborateness and adornment of attire. They range, with more or less of freedom, through some circuit of entertainments and company. They read novels; they are out late; they swallow solid or liquid trash; they dance, they flirt, they court —until marriage comes to close the last scene of this strange, eventful history—and then to reopen it, as soon as the birth-cry of the first-born thrills the mother's heart.

Great harm is often done to maidens for want of knowledge in them, or wisdom and care in their parents. The extremes of fashions are very prone to violate not only taste, but physiology. Such cases are, tight lacing, low-necked dresses, thin shoes, heavy skirts. And yet, if the ladies only knew it, the most attractive costumes are not the extremes of fashions, but those which conform to fashion enough to avoid oddity, which preserve decorum and healthfulness, whether or no; and here is the great secret of successful dress—vary the fashion so as to suit the style of the individual.

A sensible girl and her sensible mother can accomplish all this. Indeed, let such a pair as that consult confidentially and unreservedly, and that girl is safe every way. She will dress beautifully, and yet comfortably; she will enjoy herself com-

pletely, and yet without disordering her stomach, killing the roses in her cheeks, or draining her life out in fatigues and sleeplessness; she will read extensively and abundantly, yet without slip-slopping her mind away with the novels of the foolish sort, or inflaming and disorganizing it with such printed erysipelas as Braddon's and Ouida's books.

Last of all the parental cares is the use of whatever influence can be exerted in the matter of courtship and marriage. Maidens, as well as youths, must, after all, choose for themselves. It is their own lives which they take in their hands as they enter the marriage state, and not their parents'; and as the consequences affect them primarily, it is the plainest justice that with the responsibility should be joined the right of choice.

The parental influence, then, must be indirect and advisory. Indirect, through the whole bringing up of their daughter; for if they have trained her aright, she will be incapable of enduring a fool, still more a knave; her feminine instincts and intuitions, cultivated and sanctified by the purity and intelligent thought of a refined home, will have become capable of giving great light upon any question of liking or disliking that may arise, and the truthful unreserve of a good daughter with a good mother will usually supply all the further guidance that is necessary. If a sensible matron and a sensible maiden together cannot conclude

pretty safely in any case where a young man is concerned, the question may about as well be decided by tossing up a cent.

Yet there are some points respecting the intercourse of young women with young men that are worth referring to. They come pretty much within one general rule:

A young woman and a young man had better not be alone together very much until they are married.

This will be found to prevent a good many troubles. It is not meant to imply that either sex, or any member of it, is worse than another, or bad at all, or anything but human. It is simply the prescription of a safe, general rule. It is no more an imputation than the rule that people had better not be left without oversight in presence of large sums of other folks' money. This does not mean that people are thieves—it means only that they are human; and it will be found in practice that the more thoroughly honest a man is, the more careful he is to avoid any pecuniary temptation himself, and to provide for constant and stringent oversight upon himself.

It is not good for a young man and a young woman to be left much alone together either in a dimly lighted room or a brightly lighted one; nor anywhere, except where they are liable to the ordinary interruptions of the household. The close personal proximity of the sexes is greatly unde-

sirable before marriage. Kisses and caresses are most properly the monopoly of wives. Such indulgences have a direct and powerful physiological effect. Nay they often lead to the most fatal results.

At some time before marriage, those who are to enter into it ought to be made acquainted with some of the plainest common-sense limitations which should govern their new relations to each other. Ignorance in such matters has caused an infinite quantity of disgust, pain, and unhappiness. It is not necessary to specify particulars here; but if the mother of every bride would instruct her daughter in what a woman should comply with her husband, and when and how she ought to seek to decline compliance; and if the father of every bridegroom would instruct his son as to the just limits of indulgence, as to a gentleman's duty of self-control and respect toward a lady, and as to the proper occasions for exercising such self-control in the marital relations, this is all that could be done, and it would be a great deal.

CHAPTER V.

EXERCISE DURING PREGNANCY.

In considering how the mother can adjust her ways of living during pregnancy in such a manner as to insure the termination of the process in the safest and easiest manner possible, the question of bodily exercise may be first discussed.

It is, no doubt, almost needless to argue that some such general preparation, by careful living during pregnancy, is best. But much more than such a mere general careful living is best. The period of gestation should be solicitously employed for the purpose in question, on system, regularly, and under the best accessible instructions.

It may not be generally known that before the performance of many important surgical operations, it is the practice to carry patients through a course of training on purpose to prepare their bodies to endure the expected strain upon them. This training differs, of course, from that by which pugilists prepare their bodies for the immense exertion of a fight; but its purpose is just the same

—to prepare the body to endure, with the least possible pain and injury, an unusual and violent exertion or strain. Dr. Storer (*Gynæcological Journal*, ii. 19), thus refers to this training for surgical purposes:

"Preparation of the patient before an operation, by weeks or months of careful general regimen, or of special care, ... depuration of the blood and its enrichment preparatory to the tax upon it—these were matters of cardinal importance."

There are, undoubtedly, cases in which great care needs to be taken to avoid motion during pregnancy. These cases are, where there is danger of miscarriage. This is a misfortune which, for some unknown reason, grows into what may be called a constitutional habit more quickly, and becomes confirmed more surely and permanently, than almost any other. Where it has once taken place, the danger of its happening again is greatly increased; and the utmost care is usually necessary to bring the system back again to its natural condition. One of the most important precautions for this purpose is to be as nearly motionless as possible; for the local weakness which exists in such cases seems to depend greatly upon an inability to resist what may be called the mechanical results even of the ordinary exertions of every-day life; and the restoration of the healthy local con-

ditions seem to depend greatly upon the avoidance of such exertion.

Leaving out, however, such exceptions, the general rule is not that indolence promotes the health and the easy parturition of the mother, and the health and safety of her offspring, but exactly the contrary. From the beginning of pregnancy, even more care than usual should be taken to use regular, abundant, and healthful (N. B., not excessive nor violent) exercise, particularly during the first months of the period. As its termination approaches, more and more repose may be sought, as circumstances shall indicate.

Dr. Thomas Bull, an experienced and sensible English obstetrical practitioner, gives the following clear and useful directions on this point:

"During the first six or seven months, frequent and gentle exercise in the open air and domestic occupations *which require moderate exertion*, are exceedingly desirable; both have a beneficial influence on the health of the mother, and through her, upon the child. The former invigorates health, the latter contributes, by its regular return and succession of duties, to employ her time, and thus insures that ease and serenity of mind so essential to her happiness. On the other hand, excessive effeminacy is highly injurious. The female whose time is spent in indolence, continually reclining on a softly-cushioned sofa, in the unwholesome

atmosphere of an over-heated apartment, who never breathes the fresh and pure air of heaven, but is fearful of even putting her foot to the ground, and who yet, perhaps, at the same time indulges pretty freely an immoderate appetite, under such circumstances, is not likely to preserve her health, much less to improve it; in fact, it must suffer serious injury. Unfortunately the evil will not stop here; for by such improper and injudicious conduct the nutrition and growth of the child must, as a natural consequence, be much interfered with, and when born, it will be feeble, perhaps emaciated, and will be reared with difficulty.

"During the last few weeks exercise should still be taken in the open air; but as walking, with some, is now attended with inconvenience, and so quickly with fatigue, that it is injurious instead of useful, exercise in a convenient and easy carriage becomes indispensable. Domestic duties must be almost altogether given up; and the recumbent position ought to be resorted to for at least two or three hours in the course of the day; and it should never be forgotten that throughout the whole period of pregnancy, every kind of agitating exercise, such as riding in a carriage with rapidity on uneven roads, dancing much and frequently, lifting or carrying heavy weights, ought to be avoided; in short, all masculine and fatiguing employments whatever."

Dr. Verdi, in his *Maternity*, devotes but little space to general hygiene, as his work is a detailed enumeration of maladies and their remedies. The half-dozen lines in which he condenses his recommendations on this question of exercise are very solid sense. He says:

"Take daily exercise in the open air; do not lace; do not run; do not jump; do not drive unsafe horses; give up dancing and riding" [*i.e.*, on horseback]; "do not plunge into cold water. Many women in your condition will tell you they have done these things, and no harm befell them; still, do none of them. Sponging your body will answer for cleanliness, and a happy heart for the dancing and riding."

"A gently active life," is the still briefer and very judicious phrase used by another authority, who adds that even the strongest must be careful to practise moderation in this activity.

Moderate, gentle, agreeable exercise daily, then, is the rule; some of it in the open air always if possible; and to include, where it is otherwise expedient, a share of the housework. This exercise to be taken more especially during the first seven months or thereabouts of pregnancy, and to be gradually diminished as health and comfort require, until confinement. Good exercises are, walking, but not to fatigue; driving, but over smooth roads, at a moderate speed, and with safe horses.

The things to be avoided are: fatigue, and sudden strains and exertions; and things that ought not to be done, as liable to produce those results, are: riding on horseback; driving rapidly, or so as to be jolted, in a carriage; riding in railway cars; dancing; running; jumping; reaching aloft (as in hanging out clothes, or putting up curtains); carrying weights (as a pail of water, a heavy basket, etc.); standing or kneeling for a long time; singing much while in either of these postures.

In all this, moreover, it should be remembered that the forenoon is the best part of the day for exercise; the afternoon the second best only; the evening the worst; and early going to bed highly expedient. Exercising in the morning, and avoiding it in the latter part of the afternoon and evening, will secure two advantages: *first*, the use of the best of the physical strength, and thus avoiding the additional risks from exertion when the body is more or less fatigued with the results of the day's occupation; and *second*, the use of the best of the sunshine and air, which are always more vital and inspiring in the forenoon; while toward evening there is risk of harm from dampness, dew, and cold.

One caution should here be added, which has become necessary only of late years. During pregnancy even more care than usual should be ob-

served, to avoid doing *treadle-work*, either on a sewing-machine, or on a melodeon or other similarly operated musical instrument. **This is a point of much importance.**

CHAPTER VI.

THE SITZ-BATH, AND BATHING GENERALLY, IN PREGNANCY.

BATHING, like eating, should be agreeable. For healthy people, and properly managed, it is agreeable. It is an error to insist upon one particular mode of applying water to everybody alike. Strength, constitution, present physical condition, previously acquired habits, should all be considered. It would be inconsiderate if not quackish, for instance, to prescribe a full bath in cold water immediately upon getting out of bed, for everybody, men, women, and children, sick or well, all alike. Some persons of abundant vitality and great and prompt reactive power, would find a daily thorough plunge and swim agreeable, even if they had to cut a hole in the ice to make room enough to swim in; while another, of weaker physique, might be so chilled by the process as to experience dangerous internal congestions or other affections of the circulation and vital processes.

Accordingly, the bath should be cold, tepid, warm, or hot; full or partial; by plunge, sponge, douche, sitz, etc.; at rising, before meals, or at bed-

time, and so on, as the condition and characteristics of the individual require.

These suggestions are especially important, of course, in regulating the use of the bath during pregnancy. As in the case of physical exercise, a proper allowance of it is of great importance and advantage, while excess or error in employing it may do much harm.

The milder of the modern methods of hydropathic practice afford very sensible directions for managing the application of baths for medical or physiological purposes; and such suggestions as are here offered are believed to be in accordance with those mild methods.

The usual bathing for cleanliness, it is taken for granted, will be kept up during pregnancy, of course. That use of cold or tepid water which has been found suitable for this purpose will not be less agreeable, healthful, or restful, at this period than at others.

Of the use of the sitz-bath in particular, Dr. Shew speaks as follows:

"Pregnant women receive much benefit from a constant use of this bath. A small tub of sufficient size, set upon a very low stool, or anything by which it may be raised a few inches, is quite sufficient. Unpainted wood is the best material, metal being unpleasant and cold. The water is used from one to five or six inches deep. The

length of time this bath is used varies from a few minutes to two hours or more. To avoid exposure to cold, it is best to uncover only the part of the person to be exposed to the water. This bath has the effect of strengthening the nerves, or drawing the blood and humors from the head, chest, and abdomen, and of relieving pain and flatulency; and is of the utmost value to those of sedentary habits. It is sometimes well to take a foot bath, tepid or cold, at the same time. If a large quantity of cold water were used in this bath, it would remain cold too long, and thus drive the blood to the head and upper parts of the body, which might be very injurious; but the small quantity of water used at once becomes warm, and thus admits of speedy reaction. In some local diseases of the lower parts, where there is inflammation, and the cold water feels most agreeable, the water is frequently changed. If there is any inclination to headache, or too much heat in the head, a cold bandage upon the forehead or temples is good. It is often well to rub the abdomen briskly during this bath. The sitz-bath may be used by any person, whether in health or otherwise, without the slightest fear of taking cold. Let those subject to giddiness, headaches, or congestion of blood in the upper regions, try this, and they will at once perceive its utility."

The tub or bath used for this purpose should be

large enough to admit of rubbing the person, if desirable. It will be found a great convenience to raise it a few inches from the floor. Care should be taken not to use the sitz-bath while the stomach is fully occupied in digestion, as the call made upon the skin and circulation by the bath diverts too much of the vital power from the stomach. In his *Water Cure Manual*, Dr. Shew thus sums up the uses of the sitz-bath:

"As a tonic to the stomach, liver, bowels, womb, spine, etc., this bath is highly useful. In constipation and other irregularities it is famous. Those of sedentary habits will find its use of rare service. For the tonic effect, it is taken for from ten to twenty-five minutes or more. If it is continued some length of time, the water is to be changed once or more, as it would otherwise become too warm.

"In pregnancy, besides general ablutions, the semi-daily use of this bath is productive of great good. In those troublesome itchings (*pruritus pudendi*), this application should be made as often as the symptoms occur, and the remedy will be found a sovereign one.

"In piles and hemorrhoids the cold-hip bath is used, and in all acute diseases of the genital organs.

The best time in the day for the sitz-bath is just before retiring for the night. Probably the best

temperature for the water is 90° F. No shock should be given to the system, and the bath should be so arranged as to be entirely comfortable. It is well, while in the bath, to have an attendant rub thoroughly but gently the back, from the shoulders down to the hips, with the bare hand, and also the sides and abdomen. Besides the general tonic effect upon the whole system, this practice, strengthens all the muscles of those parts greatly, and relieves any congestion that may have been caused by clothing or other means. We have never known a woman who used the sitz-bath properly during pregnancy but found great benefit from it.

CHAPTER VII.

PAINLESS PARTURITION BY FRUIT DIET.

In 1841, there was privately printed in England, a small pamphlet of twenty-two pages, in which a gentleman, who was a chemist, gave an account of an experiment he himself tried in the case of his wife, whose labors had been so excessively painful that there was much reason to fear she would not survive the next one. The result was so favorable that he felt it his duty to publish it with his name and residence, and a reference to "the ladies, No. 27 Charlotte Street, Portland Place, London," where inquiries might be made by others wishing to verify the experiment; and where, it was requested, might be left accounts of other successful results of the plan of action.

A few experiments were made in Boston and vicinity with distinguished success; when the discovery of ether rather threw it into the shade. As, however, there are persons, especially out of New England, who do not use ether, the following extracts are made from the pamphlet in question, which has now become very scarce, and indeed, practically inaccessible. It will be best to begin by

stating the principle of the system, with which the experimenter ends his account, viz., "In proportion as a woman subsists during pregnancy upon aliment which is free from earthy and bony matter, will she avoid pain and danger in delivery; hence the more ripe fruit, acid fruit in particular, and the less of other kinds of food, but particularly of bread or pastry of any kind, is consumed, the less will be danger and sufferings of childbirth."

The subject of this experiment had, within three years, given birth to two children; and not only suffered extremely in the parturition, but for two or three months previous to delivery her general health was very indifferent; her lower extremities exceedingly swelled and painful; the veins so full and prominent as to be almost bursting; in fact, to prevent such a catastrophe, bandages had to be applied; and for the few last weeks of gestation, her size and weight were such as to prevent her attending to her usual duties. She had on this occasion, two years and a half after her last delivery, advanced full seven months in pregnancy before she commenced the experiment at her husband's earnest instance; her legs and feet were, as before, considerably swelled; the veins distended and knotty, and her health diminishing.

She began the experiment in the first week of January, 1841. She commenced by eating an

apple and an orange the first thing in the morning and again at night. This was continued for about four days, when she took just before breakfast, in addition to the apple and orange, the juice of a lemon mixed with sugar, and at breakfast two or three roasted apples, taking a very small quantity of her usual food, viz., wheaten bread and butter. During the forenoon she took an orange or two and an apple. For dinner took fish or flesh in a small quantity, and potatoes, greens, and apples—the apples sometimes peeled and cut into pieces; sometimes boiled whole, along with the potatoes; sometimes roasted before the fire, and afterward mixed with sugar. In the afternoon she sucked an orange or ate an apple or some grapes, and always took some lemon-juice mixed with sugar or treacle. At first the fruits acted strongly on the stomach and intestines, but this soon ceased, and she could take several lemons without inconvenience. For supper she had again roasted apples or a few oranges, and rice or sago boiled in milk; sometimes the apples, peeled and cored, were boiled along with the rice and sago. On several occasions she took for supper apples and raisins, or figs with an orange cut among them, and sometimes all stewed together. Two or three times a week she took a teaspoonful of a mixture made of the juice of two oranges, one lemon, half a pound of grapes, and

a quarter of a pound of sugar or treacle. The sugar or treacle served mainly to cover the taste of the acids, but all saccharine matter is very nutritious. The object in giving these acids was to dissolve as much as possible the earthy or bony matter which she had taken with her food in the first seven months of her pregnancy.

She continued in this course for six weeks, when to her surprise and satisfaction, the swelled and prominent state of the veins, which existed before she began, had entirely subsided; her legs and feet, which were also swelled considerably, had returned to their former state; and she became so light and active, she could run up and down a flight of more than twenty stairs with more ease than usual when she was perfectly well. Her health became unwontedly excellent, and scarcely an ache or a pain affected her up to the night of her delivery. Even her breasts, which at the time she commenced the experiment, as well as during her former pregnancies, were sore and tender, became entirely free from pain, and remained in the very best condition after her delivery also, and during her nursing.

At nine o'clock on the evening of March 3d, after having cleaned her apartments, she was in the adjoining yard shaking her own carpets, which she did with as much ease as any one else could have done. At half-past ten she said she believed

ner "time was come," and the accoucheur was sent for. At one o'clock the surgeon had left the room. He knew nothing of the experiments being made, but on being asked, on paper, by the husband two days afterward, if he "could pronounce it as safe and as easy a delivery as he generally met with," he replied, on paper, "I hereby testify that I attended Mrs. Rowbotham on the 3d instant, and that she had a safe labor, and more easy than I generally meet with." On his asking the female midwife if she thought it as easy as usual, she replied, "Why! I should say that a more easy labor I never witnessed—I never saw such a thing, and I have been at a great many labors in my time."

The child, a boy, was finely proportioned and exceedingly soft, *his bones being all in gristle*, but he became of large size and very graceful, athletic, and strong as he grew up. The diet of his mother was immediately changed on his birth, and she eat bread and milk and all articles of food in which phosphate of lime is to be found, and which had been left out before. She also got up from her confinement immediately and well. After her last delivery, July, 1838, full ten days elapsed before she could leave her bed, and then she swooned at the first attempt; on this occasion, March, 1841, she left her bed the fourth day, and not only washed but partly dressed herself. Had she not been influenced by custom and somewhat timid,

she might have done so sooner. To be assisted appeared like a burlesque to her, not to say annoyance. She had no assistance from medicine; only one bottle had been sent by the surgeon, and this she refused to take.

In the former pregnancy she had subsisted very much on bread, puddings, pies, and all kinds of pastry, having an idea that solid food of this kind was necessary to support and nourish the fœtus—and it is quite right to suppose that nutritious food is necessary for this purpose; but nutritious food can be had without that hard and bony matter, which is so large an ingredient in wheaten flour, for instance. The West Indian grains—sago, tapioca, rice, etc.—have little of it; and Mr. Rowbotham made a table of substances, with the proportion of phosphate of lime in each, so that it may be avoided in the food during pregnancy, and used afterward in nursing, when the bones and teeth of the child are made. Wheat contains most earthy matter. [In Parke's *Chemical Catechism*, page 194, he quotes La Grange as saying that a person who eats a pound of farina a day, swallows in a year three ounces, four drachms, and forty-four grains of phosphate of lime.]

Beans, rye, oats, barley, *have not so much earthy* matter as wheat. Potatoes and peas not more than *half as much;* flesh of fowls and young animals *one-tenth;* rice, sago, fish, eggs, etc. *still*

less ; cheese, *one-twentieth ;* cabbage, savoy, broccoli, artichokes, coleworts, asparagus, endives, rhubarb, cauliflower, celery, and fresh vegetables generally ; turnips, carrots, onions, radishes, garlic, parsley, spinage, small salad, lettuce, cucumbers, leeks, beet-root, parsnips, mangel-wurzel, mushrooms, vegetable marrows, and all kinds of herbs and flowers, average less than *one-fifth ;* apples, pears, plums, cherries, strawberries, gooseberries, raspberries, cranberries, blackberries, huckleberries, currants, melons, olives, peaches, apricots, pine-apples, nectarines, pomegranates, dates, prunes, raisins, figs, lemons, limes, oranges, and grapes, on the average are *two hundred times less* ossifying than bread or anything else prepared of wheaten flour.

Some articles, as honey, treacle, sugar, butter, oil, vinegar, and alcohol, if unadulterated, are quite free from earthy matter. But still worse than wheaten flour is common salt, and nearly as bad are pepper, cinnamon, nutmeg, cloves, ginger, coffee, cocoa, Turkey rhubarb, liquorice, lentils, cinchona or Peruvian barks, cascarilla, sarsaparilla, and gentian.

With regard to drinks, no water except rain and snow, as it falls, and distilled water, is free from earthy matter, and every family should have a distilling apparatus ; and perhaps it would pay capitalists to form a company for the purpose of distilling water on a large scale. Filtering water

is not sufficient to purify it of earthy matter, because a filter can only remove such particles as are mechanically mixed, and mere boiling produces no beneficial change. Spring water, pure and limpid as it appears to the eye, is found, upon chemical examination, to contain a very large proportion of calcareous earthy matter; so much indeed that it has been calculated that a person drinking an average quantity of water per day for forty years, will, in that time, take into his body as much as would form a pillar of marble as large as an average-sized man. As it evaporates from the body, it leaves behind the earthy matter which it holds in solution, and thus tends to choke up or incrust the blood-vessels and nerves; in short, to harden and petrify the whole system, in the same manner as we find it incrust vessels from which water is evaporated (for this incrusting only takes place where the water goes off in the form of steam or vapor). Water from rivers and pits, in addition to calcareous earthy matter, generally contains putrid or vegetable substances.

But drink of any kind is foreign to human nature in its original capacity. If men ate every day as much fruit as they ought, they would never be thirsty, and so need no drink at all.

Before adding to the above account of the experiment others made in consequence of it, by well-known persons in England and America, we

may copy Mr. Rowbotham's account of the origin of his idea. It was from reading, in the *Penny Cyclopedia*, the following paragraph:

"When first the human embryo becomes distinctly visible it is almost wholly fluid, consisting only of a soft gelatinous pulp. In this gelatinous pulp solid substances are formed, which gradually increase and are fashioned in organs. These organs in their rudimentary state are soft and tender; but in the progress of their development, constantly acquiring a greater number of solid particles the cohesion of which progressively increases, the organs at length become dense and firm. As the soft solids augment in bulk and density, bony particles are deposited, sparingly at first and in detached masses, but accumulated by degrees; these too, are at length fashioned into distinct osseous structures, which, extending in every direction until they touch at every point, ultimately form the connected bony framework of the system. This bony fabric, although soft, solid, and tender at first, becomes by degrees firm and resisting."

Upon the above remarks he reasoned thus:

"If the first visible state of the human being is that of a fluid, or soft gelatinous pulp; and if the embryo or fœtus gradually consolidates, or increases in firmness and density by the accumulation of bony particles, will it not, at any given

period of its existence, be more or less firm according to the bony matter which has been deposited?

"And is not the mother's blood the source of this bony matter, since it builds, supports, and nourishes the fœtus?

"And is not the mother's blood derived from her food and drink? and according to the proportion of bony matter existing in them, will not the fœtus become more or less firm and resisting?"

Moreover, he knew that it made all the difference whether the fœtus were in gristle or not, at birth, with respect to the pain of labor; and that it was better for the future size and beauty of the child, and even its strength, that it should be born with gristle, and not with the bones hardened, but that the latter process should be the consequence of its own food taken after birth. Hence he very philosophically concluded to try the experiment of having his wife feed during gestation on substances which did not hold a large proportion of phosphate of lime, which is the hard ingredient of bone, but take those substances during her period of nursing, and feed the child upon them during its growth.

The experiment succeeded in a partial trial in this morbid case, and it has succeeded in every normal case in which it has been tried, as far as is now known. The first case that is reported

personally, was that of an English lady, who had learned from the pamphlet. She brought to America a most beautiful child, which attracted every body's attention; looking, as one person said, "like a young god." She said that from the first moment she thought she was pregnant, she lived without eating any bread, potatoes, or milk; but subsisted on sago, tapioca, rice, young meat—when she took meat, fruits of all kinds, and vegetables; and drank tea and lemonade made with distilled water. She said she never had an hour of nausea or discomfort during her pregnancy; had so easy a labor that she thought it not worth dreading; and her boy, small and soft at birth, became unusually large, hard, and strong at six months. When born, he, like Mr. Rowbotham's, was covered from head to foot with a downy substance that could only be seen when held against the light, superior to the finest velvet, and of a beautiful feathery appearance.

An American lady, who usually suffered terribly in labor, immediately procured the pamphlet and governed her diet by it partially, and had the easiest labor she had ever had. Another, who governed herself *wholly* by it, from the first moment she was aware of being pregnant, like the English lady never experienced a moment's discomfort before delivery. She had taken nothing made of our grains, but confined herself to the West Indian

ones—rice, sago, tapioca; and taking a disgust to our summer fruits, subsisted largely on oranges, tamarinds, marmalades, and also took a great many lemons. At first, the fruits made her bowels too loose, but she did not abandon them on that account, but took mutton broth with rice in it, to correct this effect. She also took fish and sardines, and the young of meats; for the older animals are, the greater quantity of earthy matter is contained in their secretions, and so it is even with milk. She had so little thirst that she drank nothing but a little tea made with distilled water. This lady and her husband were neither of them very young—she was thirty-five and he forty at the birth of her eldest child; and she had been an invalid in her chamber from fifteen to thirty years of her life, though very well at the time of her pregnancy, and for the first time of her life taking much exercise in the open air. Consequently, and because of her extreme nervous delicacy, she did not escape pain in the labor the first time, and the process was several hours. But in the two succeeding times, at the last of which she was forty, the labors were very short and not at all severe. In all the cases she rigidly adhered to the diet, without a single day's exception; and her three children were perfectly splendid instances of large, healthy, strong, and beautiful *physique*. The youngest of them is now eighteen years of age.

Only one ever had any important illness, and that from extraneous cause, surmounted, as the physician said, by her perfect constitution. The teeth of all these children are very hard, like rocks.

No other case is now known of such exact compliance with the conditions as this one, but in very many cases partial compliance, with corresponding success; and it is worthy of observation that in all those countries where tropical grains, rather than those of the temperate zones, are the food, and where vegetables and fruits predominate in the diet, as in the south of Europe, among the negroes of the Southern United States, among the Hindoos, and tropical nations generally, parturition is nearly painless. Combe says: "The very easy labors of native American negresses are not explicable by any prerogative of physical formation, for the pelvis is rather smaller in these dark-colored races than in the European and other white people."

Nor is it to be referred to habits of greater exercise: "The Hindoo and other females, whose habits are anything but laborious, have always very easy labors."

In short, *the diet* is the only cause to which easy or difficult labor may be referred in general. In twenty-five years there has been known no mother who tried this experiment who has not

blessed the knowledge of it; and it has saved many a young mother needless terror.

Thus far the pamphlet of Mr. Rowbotham.

A few additional observations on the subject of diet, appetite, and the stomach during pregnancy, may not be out of place.

Derangement of the stomach, to greater or less extent, is one of the most common and trustworthy signs of pregnancy. The extent and troublesomeness of this ailment will, however, be found very greatly diminished by the vegetable and fruit regimen above described, by the use of the bath, judicious open-air exercise, etc.; in short, by living in a wise, active, cheerful, and healthful manner.

A common error is, that, during gestation, the mother needs to "eat for two;" that is, that more food is necessary to support properly herself and her growing infant than at other times. This is a thorough delusion. On this point, and on diet during pregnancy generally, Dr. Bull, the very sensible and experienced English physician who has been already referred to, says:

"We habitually take more food than is strictly required for the demands of the body; we therefore daily make more blood than is really wanted for its support. A superfluity amply sufficient for the nourishment of the child is thus furnished—for a very small quantity is requisite—without the mother, on the one hand, feeling the demand to

be oppressive, and, on the other, without a freer indulgence of food being necessary to provide it. Nature herself corroborates this opinion; indeed, she solicits a reduction in the quantity of support rather than asks an increase of it; for almost the very first evidence of pregnancy is the morning sickness, which would seem to declare that the system requires reduction rather than increase, or why should this subduing process be instituted? The consequences, too, which inevitably follow the free indulgence of a capricious, and what will afterward grow into a voracious appetite, decidedly favor this opinion; for the severest and most trying cases of indigestion are by these means induced, the general health of the female disturbed and more or less impaired, and through it the growth and vigor of the child. . . . .

"If the appetite in the earlier months, from the presence of morning sickness, is variable and capricious, let her not be persuaded to humor and feed its waywardness from the belief that it is necessary so to do; for if she does, she may depend upon it, from such indulgence, it will soon require a larger and more ample supply than is compatible with her own health or that of her little one.

"If the general health, before pregnancy, was delicate and feeble, and, as a consequence of this state, becomes invigorated, and the powers of digestion increase, a larger supply of nourishment is

demanded, and may be met in such case without fear; for instead of being injurious, it will be useful. . . . .

"Lastly, a female, toward the conclusion of pregnancy, should be particularly careful not to be persuaded to eat in the proportion of two persons, for it may not only bring on vomiting, heartburn, constipation, etc., but will contribute, from the accumulation of impurities in the lower bowel, to the difficulties of labor."

A few figures given by Dr. Dewees, whose discussion of this subject is exactly in harmony with Dr. Bull's, show very clearly the absurdity of the idea that it is necessary to "eat for two." They are in substance as follows:

On an average, a new-born child, together with all the accompanying materials expelled at birth, weighs not more than ten pounds, viz., eight pounds for the child itself, and two pounds for the placenta, etc. A table of 7077 births in Paris gave an average of about two pounds less than this, being for the child itself just over six pounds. Now, a daily supply of less than three-quarters of an ounce, during the average two hundred and eighty days of pregnancy, will amount to this ten pounds; and this daily supply is decidedly less than the average quantity of unnecessary food which is usually eaten. Since, therefore, we almost always eat too much, and since the ordinary over-

plus is more than enough to supply the requirements of pregnancy, and particularly since the natural symptoms of that state usually indicate less food rather than more, it is mere common sense to conclude that pregnant women neither *want* nor *need* to "eat for two." The fact is more likely to be the seeming paradox that enough for one is too much for two; *i. e.*, that less food than usual, rather than more, is best during pregnancy.

Regularity in hours of eating is advantageous to the health; and more care even than usual should be taken during pregnancy to observe this practice. Another almost or quite equally important rule is, to eat nothing for four hours, or at least for three hours, before going to bed.

Eating should also be—as, indeed, it should always be—in moderation. It should be deliberate, and it should be cheerful. Deliberation is almost indispensable to moderation; for it is the sense of satisfaction of hunger that tells us when to stop eating, and this sense is blunted and almost useless when the food is swallowed rapidly and without thorough chewing. And the appetizing effect and healthful stimulus of cheerfulness at meals is too well known to require any detailed enforcement in this place.

CHAPTER VIII.

THE MIND DURING GESTATION.

THE process of gestation produces a kind of revolution in the organism of the mother, frequently of a very marked character. This is sometimes the case to such a degree, that she may almost be said to live two lives; one while she is pregnant, and one while she is not.

Some women experience a greatly improved state of health during pregnancy, both bodily and mentally. They feel uncommonly active, strong, gay, and happy. This is, however, not common. It is much more usual for the mother to be subject to loss of appetite, nausea, and to other disturbances of the stomach and other internal organs; to be annoyed by low spirits, fancies, and "longings;" to be nervous and irritable; and sometimes to be seriously disordered in mind for the time being.

Many women experience a good deal of discomfort from their fears of the pain of childbirth, and even from an apprehension that they will not survive it. Such apprehensions are, of course, not wholly to be avoided; yet, unless the assertions and reasonings of the present work are thoroughly

wrong; it is true that both the ailments of pregnancy and the danger and pain of parturition can be, in all ordinary cases, almost entirely done away with. And as for the danger, even in the present ordinary condition of affairs, where no efficient means are used to prepare the patient for labor or to carry her comfortably through it—even now, the actual danger of childbirth is so small, that there is no more need of being terrified about it than about any common attack of illness. How trifling is the real risk from childbearing is forcibly shown in some laboriously compiled tables in Duncan's *Mortality of Childbed Hospitals*, which show that it is one hundred and twenty to one, even in hospitals, that the childbearing woman will recover. Her chances are better than this in private practice, because health, attendance, and comfort average better in private families.

Indeed, it would be a strange self-contradiction of the divinely established order of things, if childbearing were such as to be actually a danger to the mother. It is hardly possible to conceive of a wise and kind Creator ordaining death or danger as constant companions in the individual to a process which is the very life of the species—to suppose him regularly imperilling the life of that very mother whose existence is all but indispensable to her helpless infant.

There is no more need of apprehension about a

painful or difficult labor than of the loss of life; for even under the ordinary regimen such cases are really uncommon, and almost every one passes through the ordeal without more suffering than she can well endure. Moreover, it is a well-known fact that even where the pain of childbirth is great at the immediate occasion, yet, owing to some wisely bestowed provision of nature, the impression of it vanishes almost with the pain itself, not leaving the nervous weakness and dread which often make the memory of physical suffering a serious burden long after the reality is over.

Further, setting aside these general considerations, others, which it is a principal object of this little book to explain, are additional reasons for confidence. One of these is, the extraordinary facilitation of the process of labor by the Fruit Diet system explained in the preceding chapter; and another, the hardly less assistance which can be derived, where it is deemed necessary by the medical adviser, from the use of anæsthetics, as will be shown in a following chapter.

These brief suggestions must suffice for the topic of anticipated sufferings.

Happiness, or at least content, or if not, at any rate good humor, is, it may almost be said, a duty during pregnancy. At any rate, all the best authorities, ancient and modern, agree in saying that the cheerful or sorrowful state of the mother is

often gradually, quietly, and indelibly transferred to the disposition of the child while yet unborn. Thus Mrs. Gleason, in her *Talks to my Patients*,* observes, "Many times, in the care of chronic invalids, I find some peculiar tendency to irritability or mental depression which I cannot explain, and ask if there was anything unfortunate in their mother's constitution previous to their birth, and often receive for reply, 'I was an unwelcome child, and my mother was very unhappy in the prospect of another baby, and I, too, wish I had never been born.'"

A moderately active and hygienically correct way of living, according to the directions in this book, will very greatly promote mental ease and comfort, and additional help can be derived from sensible self-control. This, however, must be a habit previously acquired. It cannot be taken up at a moment's notice by one previously in habits of peevishness, or anger, or grief; and this fact lends additional force to the considerations suggested in Chapter IV., as to the influence of the whole previous life on the maternal functions.

In discussing this point, Dr. Dewees says, "The physical treatment of children should begin, as far

* *Talks to my Patients; Hints on Getting Well and Keeping Well*, by Mrs. R. B. Gleason, M.D. New York Wood & Holbrook, Publishers. An excellent and instructive work on ladies' health and its management.

as may be practicable, with the earliest formation of the embryo; it will therefore necessarily involve the conduct of the mother *even before her marriage*, as well as during the period of pregnancy." Again, the same high authority remarks, "How especially essential and proper are certain observances of the mother during pregnancy, *that she may insure desirable dispositions to her infant.*"

Dr. Dewees thus enumerates the possible evils of indulging a bad temper during pregnancy:

"The immediate evils which may result from yielding to temper, are convulsions, nervous inquietudes, uterine hæmorrhage, and perhaps abortion. Should this last not occur, the fœtus may yet receive such injury as shall impair its natural stamina, and thus entail upon it a feebleness of constitution so long as it may live. It is a remark long since made, and we believe it to be in perfect conformity with fact, that passionate and irritable women are more prone to abortion than those of an opposite temperament. . . .

"Nothing contributes more certainly to the safety and future good health of the child than cheerfulness of mind, or at least equanimity, on the part of the mother."

A well-known belief respecting both the mental and physical condition of women during gestation is, that they are subject to what are called "longings," viz., desires for some article, usually of diet.

which desires must be gratified, or else the child when born will be found "marked" with a spot in the similitude of the things longed for. This notion is mostly nonsense. Considering that the process of gestation renders the mother peculiarly liable to both bodily and mental disturbances, she is justly entitled to additional care and kindness, exactly as any person is who is similarly affected from whatever cause. Therefore, her wishes should be gratified as far as practicable, even though they may seem unreasonable. Where they are obviously wrong they should not be gratified; and there need be no fear of any really dangerous consequences from a refusal. "Ungratified longings," observes Dewees, "may cause sickness at the stomach, temporary loss of appetite, sometimes vomiting; *but here the evil ceases, so far as we have observed.*"

On these same points of self-control, of reasonable indulgence, and effects of temper and of "longing," Dr. Verdi says:

"It will do no harm to avoid what is repugnant to you, but it may be detrimental to your health to satisfy the longing for slate-pencil, chalk, or other deleterious substances which sometimes women in your condition crave

"But above all, keep a cheerful mind and do not yield to grief, jealousy, hatred, discontent, or any perversion of disposition. It is true that your very

condition makes you more sensitive and irritable, still, knowing this, control your feelings with all your moral strength.

"Your husband should be aware, also, that this unusual nervous irritability is a physical consequence of your condition, and would therefore be more indulgent and patient, unless he is a brute.

"If you believe that strong impressions upon the mother's mind may communicate themselves to the fœtus, producing marks, deformity, etc., how much more should you believe that irritability, anger, repinings, spiritual disorders, may be impressed upon your child's moral and mental nature, rendering it weakly or nervous, passionate or morose, or in some sad way a reproduction of your own evil feelings. And, indeed, this is more frequently found to be the case than is the physical marking of a child by its mother's impressions."

With regard to the belief that sudden frights or painful or startling impressions of any kind upon the mother produce corresponding results upon her unborn child, there is a conflict of evidence, but, it is believed, with a decided preponderance against the existence of such liability. The case stands somewhat thus:

There are many accounts, very detailed and circumstantial, of the birth of children with

marks corresponding to the painful impressions upon the mother during pregnancy. These cases are to the same extent proved as are cases of modern miracles by images of the Virgin Mary, many spiritualist phenomena, etc. That is, many perfectly honest and respectable people have believed in their occurrence.

But, in the first place, there is no nervous connection between the mother and her unborn child; and therefore the only means known to physiology by which sudden impressions can be transmitted are absent. Gradual modifications, derived from the continued circulation of the same supply of blood through both bodies, are on a very different footing. Moreover, there are many recorded cases of the occurrence of terrible experiences during pregnancy without any ill results on the child. Cases even are recorded of the death of the mother and the subsequent birth (though of course in a very short period) of a healthy child. And again, physicians have more than once instituted systematic and extensive inquiries for authentic instances of "mother's marks" without finding even one. Such was the well-known investigation of the celebrated English surgeon, Dr. William Hunter, who carried his observations through *two thousand consecutive cases* of childbirth at a lying-in hospital to which he was attached. In every one of these, as soon as the woman was delivered, he

asked if she had been disappointed of anything she had longed for, and if so, what it was; also, if she had been suddenly shocked or surprised in any way, and how; or frightened by any unsightly or horrid object, and what. The answer in each case he regularly noted down, and he then inspected the child; and he never in any single instance met with a coincidence. He found blemishes where no cause was acknowledged, and found none where some cause was given; but absolutely nothing to support the belief.

Dr. Dewees, who quoted Dr. Hunter's experiments and other authorities, states his conclusion thus:

"Nor do we believe in the influence of the "imagination" upon either the form, color, or future destiny of the child, however powerfully this faculty may have been exerted during gestation. We entirely reject all the reasoning, as well as the appeals to facts supposed to be illustrative of this wonderful influence. We have, ever since our commencement in business, been attentive to this subject, and we can most conscientiously declare we have never, in a single instance, had reason to believe the imagination had exerted the slightest control, *though contrary to our early belief upon this subject.*"

It is comfortable, where there is evidence on both sides, to find that the most agreeable doctrine is at

any rate well enough supported to justify a belief in it by anybody who prefers it.

The most extreme views thus far put forth respecting the mental perversions resulting from pregnancy are those of Dr. Storer, in his *Reflex Insanity in Women*. In this work Dr. Storer shows the well-known, intimate, and powerfully sympathetic connection between the uterus and its associated organs, and the brain; and he proceeds to arrange many of the phenomena of pregnancy in a manner admitting of a scale of intensity or importance, from headache, irritability, low spirits, and difficulty of self-control, through such phenomena as a morbidly extravagant love of pets, longings, etc., up to such manifestations as an irresistible impulse to steal (kleptomania), and even to actual temporary insanity; and he even argues that women ought not to be punished for crimes committed during pregnancy. This may be just, but if so, it is equally unavoidable that women during pregnancy must be so kept that they cannot commit crimes.

Dr. Storer's discussion is even painfully interesting, though the limitations which would be applied by a full handling of the question would remove the first unqualified impression of terror; for to argue that insanity, or at least irresistible immoral impulse, is a condition of pregnancy, is little better than arguing that death is a condition

of it. No such consequences ensue except in exceptional cases; and those where real and important danger exists are still fewer.

Yet the undoubted existence of such extreme cases, notwithstanding their fewness, lends great force to the views expressed in this chapter upon the existence of a disturbed condition of the mind, or at least of a liability to such disturbance, during gestation, and to the suggestions made for controlling such disturbance.

To recapitulate and complete the suggestions of this chapter:

Be even-tempered and good-natured; remember that the transfer of your *habitual states* of mind or body to your child is substantially certain.

Avoid horrid and uncomfortable sights and stories. It does no harm to avoid them, and it avoids discomfort if not danger. If they are encountered, however, remember that they have millions of times been encountered without harm; that there is not the least certainty of their doing harm; that there is much more evidence, indeed, that they cannot do harm than that they can.

Have whatever you can get that is harmless, that you want. If it is harmful, go without it; if you cannot get it, do the same, and think of something else.

Understand that your unreasonable fancies and impulses are temporary; superficial, so to speak,

and not real; and use the same good sense and self-control about them that you should do in managing your temper and impulses at all times. It is a received truth that even actual lunatics are capable of a great degree of self-control, and that its exercise is an important element in their cure. Much more will it be found efficient in the government of such mental irregularities as arise from a condition which is in its own nature perfectly natural and perfectly healthful.

Enlist the sympathy and aid of your husband, of your physician, and of such other close and confidential friends as you may possess.

Let your love for your own baby reinforce your resolution to adhere to such a line of behavior as is best.

Lastly, reflect that philosophy may teach you that it is useless and foolish to allow yourself to torment yourself over whatever you find you cannot help; that not only selfishness, but justice and decency and love call on you to act as is sensible and right, for your own sake, for the sake of your husband and your friends, and for the sake of your own baby; and if you are so happy as to possess a living religious faith, use that. It is given you for the express purpose of helping out your lower motives where they are feeble, and where they disappear, of

affording you a clear and practicable path for thought and action.

Make a proper use of that set of motives, and no place is left for the mental disturbances of pregnancy to do any great harm.

CHAPTER IX.

THE AILMENTS OF PREGNANCY.

Those ailments to which pregnant women are liable are, most of them, inconveniences rather than diseases, although they may sometimes be aggravated to a degree of real danger. Arising as they do from the temporary physical condition of the organism, what they require is not such medical treatment as may be needed for a true disease, but rather a general hygienic regimen; and for a similar reason, while on one hand it may not be possible to remove them entirely, yet on the other they can almost always be greatly alleviated.

In general, therefore, it may be first observed that such a way of living as shall maintain and elevate the standard of general physical and mental health will of course increase the power of resisting and surmounting all ailments whatever. Accordingly, the two chief instrumentalities toward that end which are urged in this book, namely, the judicious use of baths, and the fruit diet system, may be confidently relied upon to greatly diminish the discomforts incident to the period of pregnancy.

It may, however, be useful to briefly enumerate

the difficulties, not which every pregnant woman must have, by any means, but one or more of which different women are liable to experience. What has been before recommended on general principles in the previous chapters is here implied of course. The suggestions in this chapter are not intended to furnish a substitute for the advice of a physician, but to give directions for cases that do not require his attendance. As is repeatedly remarked under the various heads that follow, he should be called in promptly where the case is at all serious; and, under the peculiar circumstances of pregnancy, it is probably good sense to call him too often rather than too seldom. By a good understanding with your physician you can almost always induce him to prescribe for you only hygienic remedies rather than poisonous drugs. There are multitudes of doctors who would give very few medicines did not their patients demand them.

Sickness at the stomach at rising in the morning or at eating.—This is usually most annoying in the first months of pregnancy. After quickening, it usually disappears or diminishes. Sometimes it only happens during the latter months, or reappears at that time, and then continues until delivery or a few days before it. In this last case, viz., of the latter months, it will be best to consult a physician if there be vomiting to such an extent as to be troublesome.

In the first case, much is to be expected from the general regimen herein prescribed for body and mind. In case of nausea on getting out of bed, the evil may sometimes be cheated by lying comfortably in bed while you eat breakfast. Swallowing a very little pounded ice will sometimes give relief, and so will a cold wet compress over the stomach. If these fail, try hot fomentations over the same region, continued for ten or fifteen minutes, and to be followed by wearing a wet girdle.

If any particular kind of food is "longed" for, it is more likely to be retained. So is an *unexpected* article of food. Where the retention of food is particularly difficult, some concentrated form of nourishment may be used, as beef tea, calf's foot jelly, etc., as its small bulk is less liable to excite the irritability of the stomach.

There is much reason for believing that this "morning-sickness" is not a necessary accompaniment of healthful pregnancy, but due, in great measure at least, to such conditions of modern civilized life as may be effectively varied in such a way as to escape it. If, however, the decisive change of regimen which would happen to most women by the adoption of the fruit diet and bath method be not adopted, the nausea must be put up with.

Deranged appetite.—"Longings" have been dis-

cussed. Where the appetite fails, let the patient go without eating for a little while, say for two or three meals. If, however, the strength begins to go, try the offering of some unexpected delicacy; or give small quantities of nourishing food, as directed in case of nausea.

Flatulence and colic.—Eat in small quantities and often, instead of rarely and largely; and eat nothing for three or four hours before bedtime. Chew thoroughly. These directions are because these ailments usually come from bad digestion. Sometimes drinking a tumbler of warm water will bring on vomiting and relief from wind; if in the lower bowels, an injection of warm water may relieve.

Heartburn.—To be prevented by right living. In particular, let magnesia, chalk, or other alkalies *be avoided*, and try a day's fasting, and another day's very small eating. A very severe heartburn will often be relieved by drinking rapidly several tumblers of blood-warm soft water, so as to vomit easily. Those, however, who adopt a proper regimen are not likely to have heartburn.

Constipation.—For this common and troublesome disorder of pregnancy, the fruit diet and healthy exercise are the best preventives. Injections of tepid water will often facilitate evacuation. A physician should always be consulted before the case becomes serious. The fruit diet and exer-

cising regimen may sometimes be reinforced by drinking a glass of water just before going to bed, or by eating an orange before breakfast. This difficulty is much more easily prevented than cured; and it is the more indispensable to provide against it, since it tends directly and powerfully to bring on a train of painful and dangerous consequences, resulting in headache, palpitation, and perhaps piles, inflammation of the bowels, and even miscarriage.

Diarrhœa.—This may be a result of constipation, the watery discharge being secreted by the lining of the bowels in the effort to discharge the compacted waste matter. The tepid sitz-bath, with injections of small quantities of cool water, together with lying quietly on the back, will generally remove the difficulty. This, with a proper regimen, will in all probability either prevent it or cure it. Care should be taken to keep the abdomen warm by proper clothing.

Piles.—For cases of significance consult a physician. As with constipation, so with piles, its frequent result; fruit diet, exercise, and sitz-bath regimen will do much to prevent the trouble. Frequent local applications of a cold compress, and even of ice, and tepid water injections, are of great service. Walking or standing aggravate this complaint; lying down alleviates it. Dr. Shew says, "There is nothing in the world that will produce so great

relief in piles as fasting. If the fit is severe, live a whole day, or even two, if necessary, upon pure, soft cold water alone. Give then very lightly of vegetable food."

Toothache.—There is a sort of proverb that a woman loses one tooth every time she has a child. Neuralgic toothache during pregnancy is, at any rate, extremely common, and often has to be endured. It is generally thought not best to have teeth extracted during pregnancy, as the shock to the nervous system has sometimes caused miscarriage. To wash out the mouth morning and night with cold or lukewarm water and salt is often of use. If the teeth are decayed, consult a good dentist in the early stages of pregnancy, and have the offending teeth properly dressed. Good dentists, in the present state of the science, extract very few teeth, but save them.

Salivation.—Excessive secretion of the saliva has usually been reckoned substantially incurable. Fasting, cold water treatment, exercise, and fruit diet may be relied upon to prevent, cure, or alleviate it, where this is possible, as it frequently is.

Headache.—This is, perhaps, almost as common in cases of pregnancy as "morning sickness." It may be from determination of blood to the head, from constipation or indigestion, constitutional "sick headache," from neuralgia, from a cold, from rheumatism. Correct living will prevent much

headache trouble; and where this does not answer the purpose, rubbing and making magnetic passes over the head by the hand of some healthy magnetic person will often prove of great service.

Jaundice.—See the doctor.

"*Liver spots.*"—These, on the face, must probably be endured, as no trustworthy way of driving them off is known.

Itching.—A wash, or injection, of castile soap and water, of borax and water, or of water containing aromatic spirits of ammonia at two teaspoonfuls to a tumbler, or of water containing say fifteen grains of benzoic acid to half a pint, will commonly be effective. Solicitous cleanliness is the first requisite, and this, with no other treatment except cold hip-baths, and if necessary even ice, would probably answer the purpose.

Pain in the right side.—This is liable to occur from about the fifth to the eighth month, and is attributed to the pressure of the enlarging womb upon the liver. Proper living is most likely to alleviate it. Wearing a wet girdle in daytime or a wet compress at night, sitz-baths, and friction with the wet hand, may also be tried. If the pain is severe a mustard poultice may be used. Exercise should be carefully moderated if found to increase the pain. If there is fever and inflammation with it, consult a physician. It is usually not dangerous, but uncomfortable only.

Palpitation of the heart.—To be prevented by healthy living and calm good humor. Lying down will often gradually relieve it, so will a compress wet with water as hot as can be borne placed over the heart and renewed as often as it gets cool.

Fainting.—Most likely to be caused by "quickening," or else by tight dress, bad air, over-exertion, or other unhealthy living. It is not often dangerous. Lay the patient in an easy posture, the head rather low than high, and where cool air may blow across the face; loosen the dress if tight; sprinkle cold water on the face and hands.

Sleeplessness.—Most likely to be caused by incorrect living, and to be prevented and cured by the opposite. A glass or two of cold water drank deliberately at going to bed often helps one go to sleep; so does bathing the face and hands and the feet in cold water. A short nap in the latter part of the forenoon can sometimes be had, and is of use. Such a nap ought not to be too long, or it leaves a heavy feeling; it should be sought with the mind in a calm state, in a well-ventilated though darkened room, and with the clothing removed, as at night. A similar nap in the afternoon is not so good, but is better than nothing. The tepid sitz-bath on going to bed will often produce sleep, and so will gentle percussion given by an attendant with the palms of

the hand over the back for a few minutes on retiring. To secure sound sleep do not read, write, or severely tax the mind in the evening.

Abortion.—This has been discussed, as far as space permitted, in Chapter II.

Swelled feet and hands.—Correct living, washing with cold water, and frequent lying down, are palliatives for this difficulty. It is not dangerous, and it usually ceases with childbirth. If there are symptoms of its spreading to the whole system, consult a physician. Friction upon the limbs, applied upward, while they are lifted upon a chair or couch, is sometimes of use, and the skin may be rubbed with sweet-oil or glycerine if it becomes painfully distended. Relief has been given by the use of a roller or broad bandage round the limbs affected.

Swelling or pain in the breast.—See that the dress is loose so as to allow the natural enlargement of the bosom. Wear a wet bandage; if there be pain of a spasmodic kind foment with warm water.

Cramps.—If in the legs, to rise and walk about will often quickly remove them. Friction with the hand is of use.

Varicose veins.—Wear a laced or elastic stocking. If this is not to be had, apply carefully and snugly a roller or broad bandage of cotton cloth, from the toes upward, swathing and compressing

the leg to a point above the distended veins. Keep the legs horizontal as much as possible. Cold water, wet bandages, and hand friction may be tried.

Rigidity of the skin.—This sometimes occasions a good deal of distress in the region of the abdomen. Rubbing with sweet oil or glycerine is useful. If the skin over the abdomen is made tough and healthy by proper gentle friction before pregnancy has far advanced, most of the suffering will be avoided.

Mental disturbances.—These include nervous irritability, despondency, hysteric, and, in rare and extreme cases, loss of mental balance, and even actual temporary insanity. Enough has been said on these subjects in Chapter VIII. It is believed that the suggestions there given afford satisfactory means of preventing any avoidable trouble from this source.

Leucorrhœa.—Frequent washings, and injections of blood-warm suds of castile soap are useful. Allay itching by washing with water in which one grain of carbolic acid to an ounce of water has been dissolved.

Miscarriage.—See Chapter II. on this subject.

False pains, neuralgic and other pains.—Pains somewhat like labor-pains sometimes occur during the last one or two months of pregnancy. They may be distinguished from the real ones, however,

by laying the hand on the abdomen. In the false pain, the womb does not contract and grow hard under the hand.

Similar pains may occur from rheumatism of the womb. This may be known by the excessive sensitiveness of the abdomen, which becomes unable to endure the least pressure of the hand, or even the weight of the clothes. Consult a physician in this case. A silk wrapper next the body is often a great relief.

Various temporary or wandering pains are often felt in the back, abdomen, or legs. These are the result of nervous irritability, or perhaps of colic, and are only troublesome, not dangerous.

Womb displacements.—For such occurrences, and in case of the discharge known as "false waters," be quiet, and send for your physician.

Paralysis, amaurosis, deafness.—Pregnant women are sometimes seized with partial paralysis, with amaurosis, or loss of sight from paralytic affection of the optic nerve, and with deafness of a similar kind. As the physician will say, they are temporary affections, and may be expected to disappear after childbirth.

Convulsions.—Call your physician. In the mean time, the application of cold water to the head, and of hot water to the legs, is all that need be tried.

Mechanical inconveniences.—The inconvenience arising from the enlargement of the abdominal

region may sometimes be eased to some extent by wearing a broad belt with an adjustable lacing behind. It should be next the skin, and taken off at night.

Retention or incontinence of urine will be guarded against as far as possible by a correct way of living. Consult a physician at once, especially in case of retention, which quickly becomes dangerous. Great care should be taken to secure the natural evacuations regularly, and at any other time when the desire is felt.

CHAPTER X.

ANÆSTHETICS; FEMALE PHYSICIANS.

On the question of preventing the pains of childbirth by the administration of anæsthetics, there is a conflict of evidence, but, it is believed, with a great preponderance in favor of the practice where the pain is likely to do more harm to the nervous system than the anæsthetic could possibly do. In cases where the patient is robust, the labor likely to be short, and the suffering light, it is of course advisable to avoid the use of anæsthetics.

The chief objection urged is in substance that the effect of chloroform (the only anæsthetic which is meant in this chapter; as the others, mixtures of chloroform with ether or other substances, and also nitrous oxide, hydrate of chloral, etc., are not recommended in the present state of medical experience of them) is to so modify the constitu ents of the blood as to impede recovery and increase the liability to various bad sequences of labor. A theological objection has been made, viz., that God meant childbirth to be painful, and that it is wicked to try to ease it. To this it is sufficient to

reply that no woman is known to have made this objection, and that any *man* who chooses to undergo the agony that has heretofore too often accompanied childbirth without anæsthetics, should be made welcome to do so."

In the mean while, all that it is necessary to remark here is, that Sir James Y. Simpson, the celebrated Edinburgh surgeon who discovered the anæsthetic use of chloroform, and many other eminent surgeons after him, have used it literally in hundreds of thousands of cases of surgical operations and childbirth, with at least as little harm as for instance attends a similar number of cases of travelling by railroad and steamboat. A few quotations from medical authorities will serve to show what conclusions physicians come to from their own experience and observation of the use of chloroform.

As regards the safety of its administration in surgical cases, the following remarks by Dr. J. A. Otis embody statistics of immense significance:

"You know well the history of the use of chloroform in the Crimean and Italian campaigns, where it was employed without a single disaster; and I am informed by Langenbeck and Stromeyer that a similar result attended the seven weeks' Austro-Prussian war. In our own unhappy struggle chloroform was administered in more than one hundred and twenty thousand cases, and I am

unable to learn of more than eight cases in which a fatal result can be fairly traceable to its use."

Dr. Tilt says, of the use of chloroform in labor:

"In our own time the sting has been taken from the curse (of pain) by the discovery of chloroform, for which one of our greatest men will ever rank next to, if not before, the discoverer of vaccination."

Dr. W. P. Johnston says, in speaking of Sir J. Y. Simpson:

"Throughout the length and breadth of this great American Union there is not a single well-educated physician, I will venture to assert, who is not prepared to unite with me in the declaration that this branch (obstetrics) of the healing art is immensely indebted to that great discoverer of the anæsthetic properties of chloroform, for the evidence he afforded of its safety and beneficial effects in many cases of natural labor, but especially for its inestimable value in obstetrical operations."

Dr. H. R. Storer, until he relinquished midwifery practice, "made it his rule always to administer chloroform to parturient patients, and this no matter whether the labor was a rapid one or no or whether the patient had or had not organic disease of the heart or lungs; believing, as he did, that not only was it the physician's duty to relieve pain, here ordinarily so exquisite, and to lessen the

risk to both mother and child, as was done by the relaxation of voluntary muscles effected by the anæsthetic, but that for certain manifest reasons chloroform was preferable for obstetric use to ether."

Dr. Beatty, in his *Contributions to Medicine and Midwifery*, says:

"Its employment, *when properly conducted*" (Dr. Beatty's italics), "is not attended with any injurious effects upon either mother or child. I have never seen any unpleasant result from it, and I believe that out of the many thousand cases in which this agent has been employed in parturition, not a single case of death has occurred from its use."

In a subsequent paper, two years afterward, Dr. B. said, referring to the above statement:

"Since that time I have continued to use chloroform very extensively, and with the happiest results. I have given it to every patient who desired to have it, unless I saw some good reason to refuse. I have not pressed it upon any, and rejoice, at the end of two years' additional experience, to be able to state that in all cases its use has been productive of the greatest relief and happiness, and that in no case has anything unpleasant occurred to either mother or child during its administration, or subsequent to delivery. . . . It will be easily imagined that my confidence in the power of the agent has

increased with my experience, and I now feel distressed when obliged to witness the sufferings of a patient, prolonged, perhaps, in a first case for hours, when I have the power to alleviate her agony, and (without for a moment interfering with her consciousness) to render her labor a 'pleasure,' 'happiness,' or 'heaven,'—phrases which have been frequently made use of to me by patients to whom chloroform has been administered."

The following details, given by Dr. Beatty of a case where the patient was during four hours under the influence of chloroform, will be found interesting:

"The nurse (the delivery being accomplished) was sitting at the fire with the infant in her arms, without the mother being in the slightest degree conscious of what had taken place; and in about five minutes afterward the lady turned around in bed and said to me, 'Do you think it will be soon over?' I replied, 'Don't you know that the child is born?' and I will never forget the expression of her countenance when she said, 'Now, don't deceive me, but tell me truly, shall I soon be well?' In short, it was not until the child was placed in the bed with her that she could be made to believe that her delivery had been accomplished, and she then declared most solemnly that she had not the slightest idea till that moment what had taken place."

It is true that thorough precautions must be employed in the use of this medical agent. Dr. Beatty insists emphatically upon the necessity of using a pure article, of its being taken upon an empty stomach, and in a horizontal attitude. He doubtless thought it superfluous to add what is the chief requisite of all for non-professional persons—it should never be taken except when a thoroughly competent physician superintends the whole administration and all the effects of it.

Lastly, the fruit diet and the accompanying regimen recommended in this book will be found in most cases to do away with the necessity of any anæsthetic, by the prevention of the pain.

As regards the employment of female physicians, it is apprehended that few will deny that, *other things being equal,* a female physician should deal with female patients.

There can be no doubt that the introduction of the employment of professional obstetric surgeons instead of uneducated midwives, between two and three centuries ago, was a great advance in the medical art. But the employment of skilled female assistance is another great advance; and reason and public opinion both point toward the conclusion here stated. Only, it should be remembered, *other things should be equal.* The female physician should be as thoroughly trained, as skillful, and as competent, as the male physician. That being the

case, it is impossible not to perceive how immense a relief to the feelings it must be—*and therefore to the physical condition*—to be able to depend upon a person of the patient's own sex.

SUMMARY.

PAINLESS parturition may be secured by attention to the following points during pregnancy (besides correct previous bringing up, moral, mental, and physical):

Moderate healthful exercise, and avoidance of shocks, fatigue, and over-exertion.

Comfortable or at least quiet and patient mental condition, avoiding all bad tempers.

Amusement and agreeable occupation as far as possible.

Judicious use of bathing, particularly of the sitz-bath.

The Fruit Diet, and avoidance of unsuitable food, and of alcoholic, narcotic, and other stimulants.

Watchfulness and prompt treatment of the various ailments of the situation, should they appear.

Kindness and indulgence by the patient's husband and friends.

The use of chloroform, if required, at delivery; but only if administered and watched by a professional attendant.

APPENDIX.

THE HUSBAND'S DUTY.—It is very necessary that the wife, who is pregnant, should have the co-operation and sympathy of her husband in carrying out all the details of the mode of life laid down in this book. Few women are strong enough to go alone through the months and years of child-bearing without the moral help of him on whom she looks for support. Indeed, it will often fall to the husband to decide for the wife what course it is best to pursue. He should see that she has such books to read as will be of service to her; should often read them to her. He should see that she is properly informed on all those topics that are essential to her well-being and that of the child; that proper food is provided; that means for bathing, recreation, etc., are not wanting; that care and perplexity are not bearing her down. The wise stock-breeder tenderly looks after the wants of pregnant animals. The wise man should not do less for the wife, whom he has sacredly promised to love and protect. He ought rather to do for her a great deal more.

Small Families.—It is the fashion of those who marry nowadays to have few children often none. Of course this is a matter which married people must decide for themselves. As was stated in an early chapter, sometimes this policy is the wisest that can be pursued. Diseased people, who are likely to beget only sickly offspring, may follow this course, and so may thieves, rascals, vagabonds, insane and drunken persons, and all those who are likely to bring into the world beings that ought not to be here. But why so many well-to-do folks should pursue a policy adapted only to paupers and criminals, is not so easy to explain. Why marry at all if not to found a family that shall live to bless and make glad the earth after father and mother are gone? It is not wise to rear too many children, nor is it wise to have too few. Properly brought up, they will make home a delight and parents happy.

Galton, in his great work on hereditary genius, observes that "The time may hereafter arrive, in far distant years, when the population of the earth shall be kept as strictly within bounds of number and suitability of race, as the sheep of a well-ordered moor, or the plants in an orchard-house; in the mean time, let us do what we can to encourage the multiplication of the races best fitted to invent and conform to a high and generous civilization, and not, out of a mistaken instinct of giving support to

the weak, prevent the incoming of strong and hearty individuals."

BEST AGE FOR PROCREATION.—The best age for begetting children are those years in which there is the highest vigor and maturity of body and mind. These are, for man, from twenty-five to forty or forty-five, and for woman from twenty to forty. Even healthy women lose the power of procreation between forty and forty-five. Men who take proper care of their bodies retain it much longer, though dissipated men become impotent very early in life. There are thousands of men who are impotent at forty. It is a shame to them that it is so, but nature is inexorable in her laws, and punishes all her children for disobeying them.

SHALL SICKLY PEOPLE RAISE CHILDREN?—The question whether sickly people should marry and propagate their kind, is briefly alluded to in an early chapter of this work. Where father and mother are both consumptive, the chances are that the children will inherit physical weakness, which will result in the same disease unless great pains is taken to give them a good physical education, and even then the probabilities are that they will find life a burden hardly worth having. Where one parent is consumptive and the other vigorous, the chances are just half as great. If there is a scrofu

lous or consumptive taint in the blood, beware! Sickly children are no comfort to their parents, no real blessing. If such people marry, they had better, in most cases, avoid parentage.

Importance of Physiological Adaptation.—Before two persons "fall in love" with each other they should try and decide if the union is the best one by which to produce healthy, well-bred offspring. People should never marry without love; but all who love should not marry. The object of marriage is not love, but to carry out the family relation, especially to rear and educate children, and while love is absolutely essential to a true marriage, so also is physiological adaptation. There are those who think if two persons love each other they are justified in marrying, but no marriage is a good one that takes this alone into account.

Mr. Darwin, in his great work on The Descent of Man, says, "Man scans with scrupulous care the character and pedigree of his horses, cattle, and dogs before he matches them; but when it comes to his own marriage, he rarely or never takes such care. He is impelled by nearly the same motives as are the lower animals when left to their own free choice, though he is in so far superior to them that he highly values mental charms and virtues. On the other hand, he is strongly attracted by mere wealth or rank. Yet he might by selection

do something not only for the bodily constitution and frame of his offspring, but for their intellectual and moral qualities. Both sexes ought to refrain from marriage if in any marked degree inferior in body or mind; but such hopes are utopian, and will never even be partially realized until the laws of inheritance are thoroughly known. All do good service who aid toward this end. When the principles of breeding and of inheritance are better understood, we shall not hear ignorant members of our legislature rejecting with scorn a plan for ascertaining by an easy method whether or not consanguineous marriages are injurious to man.

"The advancement of the welfare of mankind is a most intricate problem: all ought to refrain from marriage who *cannot avoid abject poverty* for their children; for poverty is not only a great evil, but tends to its own increase by leading to recklessness in marriage. On the other hand, as Mr. Galton has remarked, if the prudent avoid marriage, while the reckless marry, the inferior members will tend to supplant the better members of society. Man, like every other animal, has no doubt advanced to his present high condition through a struggle for existence consequent on his rapid multiplication; and if he is to advance still higher he must remain subject to a severe struggle. Otherwise, he would soon sink into indolence, and the more highly-gifted men would not be more successful in the

battle of life than the less-gifted. Hence our natural rate of increase, though leading to many and obvious evils, must not be greatly diminished by any means. There should be open competition for all men; and the most able should not be prevented by laws or customs from succeeding best and rearing the largest number of offspring."

CELIBACY.—The following paragraph from Mr Galton, is very significant, and though the same policy is not likely to be again repeated, in the same way, it may be in other forms which will be quite as unfortunate. He says, "The long period of the dark ages under which Europe has lain, is due, I believe, in a very considerable degree to the celibacy enjoined by religious orders on their votaries Whenever a man or woman was possessed of a gentle nature, that fitted him or her to deeds of charity, to meditation, to literature, or to art, the social condition of the time was such that they had no refuge elsewhere than in the bosom of the Church But the Church chose to preach and exact celibacy The consequence was, that these gentle natures had no continuance, and thus, by a policy so singularly unwise and suicidal that I am hardly able to speak of it without impatience, the Church (Catholic) brutalized the breed of our forefathers. She practised the arts which breeders would use who aimed at creating ferocious, currish, and stupid natures

No wonder that club-law prevailed for centuries over Europe. The wonder rather is, that good enough remained in the veins of Europeans to enable their race to rise to its present very moderate level of natural morality."

Tobacco and Alcohol.—The effects of tobacco on offspring are now known to be serious. Of course those who use but little of it may not see the direful consequences in their children, but it hardly needs the eye of a physiologist to trace many serious cases of nervous disorders, including idiocy, to the direct excessive use of this loathsome and disgusting weed. Dr. Pidduck, a London surgeon of extensive observation, says, "In no instance is the sin of the father more directly visited on the children than in tobacco-using. It produces in the offspring an enervated and unsound constitution, deformities, and often an early death." The writer of these lines has seen the most fearful effects produced upon children begotton by those whose nervous systems had been shattered by its use. A potent cause of impotency is found in the use of tobacco. Let women beware how they mate themselves with those addicted either to smoking or chewing. Not less disastrous is the use of alcoholic beverages. Dr. Napheys says, "Not only does the abuse of alcoholic beverages shorten virility, but it transmits the same tendency to the male descend-

ants, even when no intemperance can be charged, yet the peculiarly American habit of taking strong liquors on an empty stomach is most destructive to nervous force, and most certain to prevent healthy children." Darwin, than whom there are few higher authorities, tells us that intemperance, persisted in for a few generations by any family, is likely to lead to its extinction. Nature does not find it profitable to keep them on the earth,—they cannot contend with the more temperate in the struggle for existence. Morel mentions a family where the father was a drunkard, the son inherited his father's habits, the grandson had suicidal tendencies, and the great-grandson, the last of the race, was stupid and idiotic.

Determining the Sex of Children.—There are many persons who would give a great deal to know the law for determining the sex of offspring at will, and there are many respectable physiologists who, no doubt, honestly believe that they have discovered this law. Surely effort enough has been made in this field of inquiry, but with what success? The theory now more generally accepted than any other is that of Prof. Thury, of the Academy, Geneva, and his experiments seem to have been perfectly satisfactory. His theory is, that if impregnation takes place immediately or very soon after menstruation, the child will be a female; but

if impregnation does not take place until some days after, the child will be a male. Darwin, however, states in his latest works that recent experiments discountenance Thury's theory as incorrect. If this be true, our men of science will turn their attention in other directions to discover this law. Certain it is, that every false theory disproved, by negation at least, brings us one nearer the true one.

Father's *vs.* Mother's Influence.—It has been a question of much interest and no little importance, to decide whether the father or mother influences the character of the offspring most Many have contended that the mother's influence by far exceeds the father's, for the reason that the child is for months nourished by her blood, and made better or worse by her state of mind. Some writers have gone so far as to maintain, that a woman, by living right during the months of pregnancy, can make the unborn child bear almost any character she pleases, and many facts bearing on this point have been adduced. Mrs. Farnham believed this, and maintained it strongly in her "Woman and her Era." "To the masculine," said this thoughtful writer, "parentage is an incident;" and then she adds, "To the feminine it is being set apart by nature to a sacred trust which can be violated only at tremendous peril; peril to the moral and physical welfare, both of herself and the com-

ing life; peril proportioned to the awful magnitude of the responsibility, and to the divine demands it makes upon nature in whose innermost depths of soul and body, a life is deposited, to draw thence support, form, and expression." Galton has probably done more to settle this question than any other man; and as his views are the most recent and not generally known, a brief statement of them will not be out of place. He carefully traced the biographies of a large number of illustrious men in different walks of life, and found that among judges, statesmen, commanders, men of literature, and men of science, in one hundred cases 70 of them would be found to have derived their talent mainly from their fathers, and 30 mainly from their mothers. In the case of poets and artists, the influence of the female line is enormously less than the male, being 94 to 6 in the former, and 85 to 15 in the latter. Eminent divines, however, he finds inherit their talent very largely from their mothers, the relation being 73 to 27 in their favor. Mr. Galton, however, admits that the apparent incapacity of the female line for transmitting peculiar forms of ability may be due to the fact that the daughters of eminent men do not marry so frequently as other women. He makes an exception in the case of the daughters of eminent divines, they being quite as likely to marry as the women of any class. If we admit the truth of these investigations, the conclusions we

must arrive at, are, that the intellectual faculties are most likely to be inherited from the father, and the moral nature from the mother, and this is no doubt near the truth. Each sex gives to the offspring what it has the most of.

In regard to bodily conformation, the same general principle seems to hold good, the male transmitting the bony frame-work and the muscular system, lungs and heart, and the female the vital organs, especially the organs of digestion and assimilation. It is well to bear these points in mind, as they may often aid in deciding the physiological adaptation of two persons who may wish to marry.

On the whole we may infer that the influence of the different sexes on offspring is about equal, and it is probably well that this is so. It gives to each an equal right in them, and imposes, if not the same, at least equal duties, and this is what all children need. A child should never be brought up under the exclusive influence of either sex; there are many things a mother only can do for it, and quite as many things a father only can do.

Shall Pregnant Women work?—Some years ago, a thoughtful mother wrote an article for a leading American magazine, from which the following sentence is taken:—"Children born of overworked mothers, are liable to be a dwarfed and puny race. I am inclined to think, however, that

their chances are better than those of the children of inactive, dependent, indolent mothers, who have neither brain nor muscle to transmit to son or daughter. The truth seems to be, that excessive labor, with either body or mind, is alike injurious to both man and woman; and herein lies the sting of that old curse." This paragraph suggests all that need be said on the question whether pregnant women should or should not labor. At least it is certain they should not be foolishly idle; and on the other hand, it is equally certain that they should be relieved from painful laborious occupations that exhaust and unfit them for happiness. Pleasant and useful physical and intellectual occupation, however, will not only not do harm, but positive good.

INTELLECTUAL ACTIVITY AND PARENTAGE.—Another question of interest is, whether great intellectual activity is favorable to maternity, or the reverse. There is probably but one answer to this question, and that is—"the more personal expenditure of nervous energy, the less maternal vigor." If all the life-force is used up on the brain and nerves, little is left for the processes of procreation. Great and constant nervous exertion involves a costly outlay of life.

E. Ray Lankester, in his excellent Prize Essay on Comparative Longevity, says, "It is noteworthy that the generative expenditure is lessened in

women when the personal expenditure is increased, as is distinctly observed in the United States of America, where the women are intellectually far more active than elsewhere, and suffer, so far, from the relatively enormous costliness of nervous outlay. Thus the material of generation serves as a store which is drawn upon before the general powers involving longevity are affected in women." The reader, however, must not misunderstand this quotation. It does not teach that women may not become cultivated and intellectual without loss of procreative power, but they must not use up too much of their energy in intellectual activity if they wish to become mothers. Engrossing literary pursuits, no less than anxiety, care, and an overtaxed physical system, interferes with procreation. There are those who spurn child-bearing as ignoble compared with intellectual labor, but the successful rearing of noble boys and girls, is the greatest work that has ever been accomplished on this planet. Literature, art, science, all pale before it. In it all culture and discipline, all goodness and beauty combine. "The woman's womanliness and the man's manliness find full expression here in the quality of offspring." James Parton says, "The best man is he who can rear the best child, and the best woman is she who can rear the best child." We very properly extol to the skies Harriet Hosmer, the artist, for cutting in marble the statue of a

Zenobia; how much more should we sing praises to the man and the woman who bring into the world a noble boy or girl. The one is a piece of lifeless beauty, the other a piece of life including all beauty, all possibilities.

Mrs. Stanton's Testimony.

Elizabeth Cady Stanton, in a lecture to ladies, delivered after most of this work was in print, thus strongly states her views regarding maternity, and painless parturition:—

"We must educate our daughters to think that motherhood is grand, and that God never cursed it. And the curse, if it be a curse, may be rolled off, as man has rolled away the curse of labor; as the curse has been rolled from the descendants of Ham. My mission among women is to preach this new gospel. If you suffer, it is not because you are cursed of God, but because you violate his laws. What an incubus it would take from woman could she be educated to know that the pains of maternity are no curse upon her kind. We know that among Indians the squaws do not suffer in childbirth. They will step aside from the ranks, even on the march, and return in a short time bearing with them the new-born child. What an absurdity, then, to suppose that only enlightened Christian women are cursed. But one word of fact is worth a volume of philosophy; let me give you

some of my own experience. I am the mother of seven children. My girlhood was spent mostly in the open air. I early imbibed the idea that a girl was just as good as a boy, and I carried it out. I would walk five miles before breakfast, or ride ten on horseback. After I was married I wore my clothing sensibly. Their weight hung entirely on my shoulders. I never compressed my body out of its natural shape. When my first four children were born, I suffered very little. I then made up my mind that it was totally unnecessary for me to suffer at all; so I dressed lightly, walked every day, lived as much as possible in the open air, eat no condiments or spices, kept quiet, listened to music, looked at pictures, and took proper care of myself. The night before the birth of the child I walked three miles. The child was born without a particle of pain. I bathed it and dressed it, and it weighed ten and one-half pounds. That same day I dined with the family. Everybody said I would surely die, but I never had a relapse or a moment's inconvenience from it. I know this is not being delicate and refined, but if you would be vigorous and healthy, in spite of the diseases of your ancestors, and your own disregard of nature's laws, try it."

APPENDIX TO THE SECOND EDITION.

THE HEALTH LIFT FOR PREGNANT WOMEN.—Within a very few years, a new system of physical culture has been introduced into a few of our large cities, and has been highly approved by very many intelligent physicians, and other persons who have used it. It consists in lifting, on a peculiarly-constructed machine, weights of iron in such a manner as to call simultaneously into rather vigorous, but not sudden, exercise nearly every muscle of the body. The effect upon the abdominal muscles, which are principally concerned in expelling the child, is to give them greater strength. In civilized woman, these muscles are generally lax and weak, owing to her sedentary habits and methods of dress; and much of the tediousness of labor is often caused by this weakness. The Lifting-Cure, as taught by Dr. Butler, of Boston, and Drs. Janes and Young, of New-York, on their delicately-contrived machines, if carefully adapted to the strength and condition of the patient, tends to cure this pelvic weakness, and so far prevent tediousness and suffering in child-birth. The reader need not be alarmed when the word

"lifting" is used, as the weights may be exceedingly light, and so evenly distributed over the body as to produce no strain upon any part; but, on the contrary, an exhilarating effect, on account of the equalizing effect it has upon the circulation. In order to bring the subject fairly before the reader, the following questions were sent to Dr. Butler, and the following answers received:

Questions.

"Have you had any experience with the effects of your lifting exercises upon pregnant women, and if so, what have they been?

"First. Upon preventing the pain and tediousness of child-birth?

"Second. What have been the effects on the health of the mother during pregnancy?

"Third. What have been the effects upon the child?

"Fourth. Are there any other effects noticed, and if so, what?"

Answers.

"The effect of the Health-Lift, as produced by us on our machines, has been to diminish the pain and shorten the time of labor in cases of women who had previously borne children; and in cases where women have borne them for the first time, regular

physicians have been astonished at the freedom from severe and protracted suffering in child-bed.

"Second. The effect on the health of the mother has been uniformly favorable.

"Third. The effect on the child has been as uniformly favorable. Of all that have been born of mothers who have lifted prior to and during pregnancy, but one has died. Mothers who, previous to lifting, have borne only puny children, have borne healthy ones. As their own health improves, they have been able to transmit vigor in place of feebleness to their offspring.

"Fourth. The barren, in several cases, have become fruitful. This, however, has not been uniformly the case.

"Fifth. Women who have invariably miscarried have, after lifting a few months, escaped this disaster, and given birth to healthy children."

So much for the Health-Lift. The reader must bear in mind, however, that lifting on delicately-constructed machinery, in such a position as to prevent strain and injury, and with light weights, and under the eye of a teacher, is a very different matter from lifting heavy pots, kettles, and weights, or on badly-constructed apparatus without a teacher. The time spent in lifting each day, under the superintendence of a wise guide, would not be more than one or two minutes, and would tax the muscles lightly but evenly, while the miscellaneous lifting would

do quite the reverse. This knowledge may often be useful to those who can take advantage of it, and need exercises of this character. The deductions of Dr. Butler are the result of observations in about fifty cases.

The Size of the Pelvis and its Relation to painless Parturition.—It would be impossible within the limits of a work like this to present any thing like a detailed description of the pelvis, so-called—that portion of the human frame which, in the female, plays so important a part in the process of parturition; but there are many things concerning it which every woman may find it of use to know, and which can be easily understood without entering into the minutiæ of its construction or employing difficult and technical words to explain.

In general terms, it may be briefly described as a bony cavity or passage, in which are inclosed the internal organs of generation, and through which the child is to pass when it has attained the highest point of intra-uterine development of which it is capable. Its outline is extremely irregular and of considerable size, varying, of course, according to individual conformation. It is composed of several bones, firmly bound together by strong ligaments, the whole forming a basin-shaped excavation, situated at the inferior extremity of the body or trunk. A circular line or ridge divides it into two unequal

parts, the upper portion being much the larger of the two, having broad flat walls sloping upward and outward, terminating at the top in what are familiarly called the hips. This circular line is what is known as the superior strait of the pelvis, and at this point, the head of the child first engages when the process of labor commences. The lower or true pelvis, that part lying below this line, is much smaller, and constitutes the outlet through which the child is to be forced into the external world. Each of these portions has been accurately measured in its several diameters, in order to establish the dimensions of the normal, healthy pelvis, and to determine what degree of deformity might exist, and yet insure safety to both mother and child. These measurements are as follows, remembering that these numbers refer only to the inside of the pelvis, and that when clothed with the soft tissues, muscles, etc., the diameters would necessarily be a little less.

The transverse diameter, or that extending directly across from hip to hip of a healthy pelvis is five inches; the antero-posterior diameter, from before backward, four inches; and the oblique diameters, right and left respectively, four and a half inches. Those of the lower portion are almost exactly the reverse of the upper, the antero-posterior diameter being about five inches, the oblique four and a half, and the transverse four. Different obser-

ers change these figures slightly, but the difference is of no practical moment. It will be seen from this description that in descending from the cavity of the abdomen into that of the pelvis, the child must necessarily perform a rotary movement before it can escape from the lower pelvis; and this is really the case. The diameters of the child's head are in harmony with those of the pelvis, and must correspond with them in its descent, in order to insure a natural and safe delivery. Wherever the head of the child can pass, the shoulders and other portions of the body can follow without difficulty.

A deformed pelvis is one whose natural symmetry has been perverted by some change, the result of accident or disease incurred in early life, and by far the great majority are the result of disease. In this country they are, happily, very rare. Nearly all the cases met with are in women of foreign birth, who have been subject, while infants, or in early childhood, to rachitis, or rickets, as it is generally called. It consists in a deficiency of the earthy matter of the bones, by reason of which they lack firmness and strength, and is caused mainly by impure air, insufficient ventilation, and neglect of cleanliness. It exists chiefly among the poor children of the large cities in England, who, at a very early age, are confined at labor unsuited to their years in close and heated factories, and workshops of various kinds That portion of their food also which

should create bony matter not being assimilated, the animal portion attains undue proportion, and the bones, in consequence, become soft, fragile, and flexible. If properly treated, however, most of these cases might in time be restored to a healthy condition, but, as too often happens, the child arrives at mature age permanently deformed. The pelvis, under these conditions, assumes a variety of forms, according to the position most frequently adopted by the child and the nature of its exercise, but most commonly it is flattened from before backward, in shape something like that of an hour-glass. Of course, there are various degrees of deformity, and it is not impossible, where it is only slight in extent, for a child to be carried to its full term and safely born, but the labor would be protracted and difficult. The following measurements of a deformed pelvis may be considered as a safe guide on this point:

If the antero-posterior diameter of the superior strait be less than four and more than three inches, it is possible for a full-grown child to pass, though instruments will probably be required. If less than three and more than two inches, the child must be sacrificed if the mother's life is to be saved, unless, as is occasionally possible, the child may be turned and delivered by the feet, the head being compressed sufficiently to allow it to pass. But should this diameter be less than two inches, the dreadful alter

native of craniotomy or Cæsarian section is presented. The responsibility of conducting such cases rests, of course, with the attending physician, who should make himself acquainted with the exact amount of deformity, and exercise his best judgment and greatest skill in averting any unfavorable termination either to mother or child. A woman whose pelvis is markedly deformed, should never become pregnant; and if this does occur, labor should be induced as soon as her condition becomes known. Women with deformed pelves are usually very thin, and of a strong consumptive or scrofulous tendency. They will notice that the hip bones are not symmetrical, one being higher than the other, or otherwise disproportioned; and, if pregnant, they "quicken," as the saying is, sooner than other women, while the abdomen shows the presence of the child at an earlier period than usual.

From this it will be seen how important it is that the pelvis should be normal in every respect, and this can only be secured by the avoidance of those causes before-mentioned, more especially if the infant is born of scrofulous or consumptive parents; for it is only in early life that this deformity occurs, never after the age of puberty. Nothing better can be done than to give such a child plenty of fresh, pure milk, animal food, if old enough; daily exercise, suited to its age, in the open air; warm clothing, free from constriction, and allowing the

full play of all its limbs, an erect carriage, a judicious system of bathing, and, in short, every hygienic influence which nature and common sense can supply.

A SPECIAL CAUSE OF PAIN IN CHILDBIRTH.—The following letter has been received from a very intelligent woman of large experience and observation, and one who gave birth to a child weighing eleven pounds without suffering, when in a condition of perfect health, but afterwards suffered much at the birth to one weighing only five pounds. She says,

"DEAR SIR: I have read your valuable work, '*Parturition without Pain*,' with great interest, and believe if the hints contained therein were carried out it would prevent a great deal of needless suffering. Will you allow an experienced woman to say that very much of the pain in childbirth is the result of a diseased condition, such as ulceration, inflammation, etc., of the os uteri? The dilation of the os uteri for the passage of the child when it is in a diseased condition gives rise to distressing pains; but I see no reason why, in perfect health, its dilation should be more painful than opening the mouth. The diet, dress, and modes of life adopted by so many women in civilized society for generations has caused a majority of them to inherit or acquire a diseased condition of the organs of

generation, which nothing but a return to a natural and healthful method of living will cure.

"Allow me, also, to add that on page 42 of your book I was sorry you did not, among other things to be avoided, mention the harm that comes from laboring much in a stooping position during pregnancy. Women who work in the field bent over at hoeing and digging, or similar work, much more frequently have the child turned from its natural position, causing wrong presentations and thus occasioning much severe pain and suffering.

"Truly, MRS. H."

MRS. PLUMB'S OPINION.—The following is an extract from a letter received from Mrs. Z. R. Plumb, just as the second edition of this work was being sent to press, whom very many will recognize as, for many years, the proprietor of a very large and useful gymnastic academy in New-York, where thousands of men, women, and children were under gymnastic training, the value of which, in many cases, can never be estimated. It is in reply to a request for her observation upon the effects of gymnastic training upon pregnant women. She says,

"While I regard exercise as all-important for a healthful, natural, and comparatively painless parturition, it should be in a suitable dress—giving perfect freedom of motion. Thus equipped, I know from personal experience that even vigorous exer-

cise during pregnancy has proved very beneficial and not hurtful, and the *control* and strength of muscle thus acquired will aid immensely at the birth of the child.

"I knew a case where a lady exercised—*as had been her previous habit* several hours daily in the calisthenium for light gymnastics until very near confinement—took sitz baths freely, and instead of miscarriage, as some might infer, there was not the slightest tendency in that direction. I heard it remarked in this case by the attending physician that it was the most *natural* labor he had ever witnessed. The presentation was perfect, and the delivery entirely satisfactory, though not without severe suffering for a few hours from constitutional causes. The child, now several years old, is finely developed and symmetrical, with apparently a higher grade of vitality and constitution than the parents possess.

"Housework has its advantages; but I think there is a tendency to overtax one set of muscles while neglecting to bring others into healthy action. There is too much standing in one position and working with the arms forward and chest contracted. Then again, in household labor, the magnetism is thrown off and expended for others, while in outdoor and calisthenic exercises the mind is relaxed, and with freedom from care, the magnetic force is retained and husbanded. Perhaps I do not make myself clear on this point; but I believe that domes-

tic labor *alone* does not fully perfect and prepare the system for the work of maternity. Sitting and bending of the form forward in child-nursing would seem to suggest the importance of counteracting exercises—throwing the shoulders backward and inducing an erect position, and expansion of the chest.

"Finally, when women and men shall revere their bodies too sacredly to deform them to satisfy perverted tastes—too holily to poison the fountain of life with the dregs of tobacco and stimulating drinks—and when men shall learn that their highest good and happiness lies in making woman *queen* in what all are willing to grant is her peculiar sphere—then, and not till then, will children be a blessing. Enforced and unwilling maternity is not the habit of the brute; why of the human, so-called, enlightened world?

"As sure as the little girl takes the serenest delight in her 'make-believe' pets, so surely would the *free*, pure, healthy, womanly woman prove true to her God-given instincts.

"Then will the earth be peopled with the glad faces of children welcome from the hour of conception, and thrice welcomed when the *now* dangerous crisis has passed, and the woman is for ever glorified and crowned with the unspeakable wealth of motherhood.

Z. R. PLUMB."

The caution elsewhere given that prospective mothers should never engage in special gymnastic exercise without the advice and oversight of a skillful and experienced teacher need not here be repeated. It would be quite as sensible to send a sick person to the druggist to choose his own remedy as to advise gymnastic exercises without at the same time providing against an abuse of them, which can only result disastrously.

APPENDIX TO THE EIGHTH EDITION.

To the Editor:

Dear Sir: Some time since I purchased a copy of "Parturition without Pain." A friend borrowing it asked permission to lend it to Dr. S., who is considered a very eminent physician. His opinion was, that it was a book calculated to do a great deal of harm, a book made to sell; so much acid put in the system by the fruit diet was a positive injury to both mother and child, giving them both the colic after the child's birth.

As I am not brilliant enough to reply to his argument in regard to the *acid*, will you please be kind enough to give me an answer for him?

Respectfully, A Subscriber.

Philadelphia, Pa., March 18, 1874.

Dear Madam: The editor has sent me your letter, dated February 4th, with the request that I should answer it.

The reasoning of Dr. S. is so absurd that I really do not see what I am to say in direct

reply. My own style of reasoning on all subjects is so practical that it will, no doubt, receive the contempt of those who have a fancy for fine theories. But I have seen so many promising theories built up without any basis in fact whatever that I prefer to seek facts direct, and let theories go.

Now, the facts in regard to a fruit diet in pregnancy, so far as I know them, are, briefly, these: The little volume "Parturition without Pain" gives a number of instances of women who, by following the rules in regard to diet, etc., have found their condition before, during, and after confinement greatly improved. Secondly, I can speak in the most positive terms in regard to myself, having, on two occasions, followed the suggestions of this volume, so far as practicable, and on both trials experiencing a *radical* change for the better. Thirdly, the experience of all who, by my example and advice, have been led to the same course of living during pregnancy, exactly coincides with mine. Fourthly, Dr. Holbrook assures me that he is constantly receiving voluntary testimony heartily indorsing the truth of the advantages of the fruit diet. Now it seems to me here are enough facts to

break down all the theories which all the professional men in the world might be able to construct against it.

I once heard a physician object to the fruit diet on the ground that it would not give enough strength to the pregnant woman to undergo the severe trial of parturition. But if the trial be robbed of its severity, where is the need of the extra strength? Again, what strength is imparted by rich, strong animal food that is ejected from the stomach, or else passes out of the system undigested and unassimilated? Or, if this food be digested and assimilated, what is the result? Why, plethora, that most dreaded foe of the pregnant woman, leading either to miscarriage or to a terrible confinement, in which the chances of death are greatly augmented.

But we do not need to theorize on this matter. Facts are sufficient. And the women who have tried the fruit diet unanimously testify that, first, there is not so great an expenditure of strength needed during confinement; and, secondly, they regain their strength much sooner afterward. At my confinement I was dressed, about my room, and at my daily writing on the eighth day, which was being quite as smart as I

expected to be on the twenty-first day under the old plan.

Dr. S.'s theory is that "the fruit diet is a positive injury to both mother and child, giving them both the colic after the child's birth." Facts prove that the doctor is mistaken.

Let us examine what the fruit diet does. Both by what it excludes and what it furnishes it prevents indigestion and nausea, or morning sickness; it avoids the dangers of plethora; and it prevents too great a hardening of the bones of the embryo, thus rendering parturition more easy. Will the doctor pretend that any of these avoided conditions are ones necessary to the good health of either mother or child? If he does, he simply proves himself unworthy to be heeded. And the hard, incontrovertible facts go to prove that colic is unknown by either mother or child when the fruit diet is faithfully adhered to.

If you have occasion to test the virtues of this diet do it without fear, feeling assured that the *theories* of any doctor under the sun can never hurt you while the *facts* are all in your favor. I hold such an undoubting faith in the efficacy of the fruit diet in pregnancy that I believe it is

capable of revolutionizing all the conditions of maternity, and, I might almost add, of removing the primal curse which declared to women, "in sorrow shalt thou bring forth children." The homœopathist might here exclaim, "*Similia similibus curantur!*" As Eve got into trouble by eating an apple, so may she get out of it by eating another.

Whatever course of diet or exercise serves to render pregnancy a state of health and comfort, and parturition easy, must be a correct and natural course. Pregnancy is a state of health, not of disease and suffering; and those who declare it to be the latter libel their Creator.

Yours truly, MRS. E. B. DUFFEY.

The following letter is from Mrs. Horace Mann, and will be found to corroborate the statement of Mrs. Duffey:

CAMBRIDGE, April 28, 1874.

To ——: On reading Mrs. Duffey's letter to you, in the last HERALD OF HEALTH, I resolved to write you of a very striking instance of the efficacy of the fruit diet in pregnancy, an account of which appeared in Dr. Holbrook's volume, en-

titled "Parturition without Pain." A sister of mine had followed that regimen strictly, and found the benefit of it in bringing into the world children of uncommon physical and mental vigor, having a development of body far exceeding her own in health. One day she visited a friend, a lady of wealth, who was out of spirits because she was expecting a repetition of the calamity which had occurred in several instances of child-birth in her own case. She was a woman of fine health, and the children whom she had successively lost (I think there were three) were fine, large specimens of the human being; but so large in the head and of such hard bone that they could not be born, and were all taken from the mother by instruments. She had found herself again pregnant, and expressed great sorrow that her own and her husband's desire to have children should meet with such sad disappointment. Everything that wealth and the kindness of the most considerate of husbands could do was always done. The first physicians and midwives gave their aid; but, after great suffering, the result had always been the same. The mother soon recovered after these trials, and insisted that she was always perfectly well after the

birth. My sister asked her how she lived as to diet and exercise. She said she drove out nearly every day, and ate the most nourishing diet—chiefly bread and milk—and digested her food well. My sister then told her of the regimen prescribed by Dr. Rowbotham, and she concluded to give it a faithful trial. Instead of driving in her carriage, and sitting still the rest of the time, she promised to take a good walk every day at stated times. When the time of birth approached, the same preparations were made as on former similar occasions, the same array of physicians and nurses were in attendance, and all friends were anxious lest a repetition of the calamity might at last prove fatal to the mother. One day she returned from a *three-mile* walk, and, feeling a little fatigued, she sat down on the rocking-chair in her bedchamber, before taking off her bonnet. Feeling a little uneasy she rose from the chair, and, as she walked across the room, the child was born upon the floor, without a premonitory pain! Since that time she has had several children with ease, and became, consequently, a convert to the system, as many of her friends were.

My sister's children were the quietest babes I

ever knew. They were less troubled with colic than most children; but it is true that their mother ate wholly in reference to them, and avoided acids and green vegetables after their birth, and always had an abundance of food for them. Respectfully,

MARY MANN.

BRISTOLVILLE, O., June, 1872.

DR. M. L. HOLBROOK:

DEAR SIR: My wife got your book "Parturition without Pain" some five months previous to her confinement. From that time she followed your directions with regard to sitz baths, and, in part, her diet. She ate very little bread, and drank neither tea nor coffee, but lived mostly on fruit and vegetables. She did her own work—four in the family—until her confinement; did not suffer any hard pain previous to the birth of the child; retired at night as well as usual, and slept soundly until two hours before the child was born. This is our fourth child, and she has heretofore been sick twelve to twenty-four hours. When our last child was born, four years ago, she was confined to her bed six weeks, but this time she was able to sit up in eight days. The

child is eleven weeks old, and she is feeling well and strong as ever. The child weighed nine and three-quarter pounds, and is fine and healthy. I never saw a child enjoy a bath any better than it does. Both of our other children cried constantly, while they were being washed and dressed, until they were a year old. I firmly believe it was my wife's bathing previous to her sickness that made the difference. I think your book was a great help to her. She wishes every woman in that situation could read your book, and hopes it may have a wide circulation.

Yours truly, B. Fauss.

The following letter was forwarded by Dr. Moffatt, an eminent physician of Brooklyn, N. Y.:

Spring Farm, N. J., July 21, 1873.

Dear Dr. Moffatt: I write knowing that you will be glad to learn that I am the happy mother of a little girl, now two weeks old. My particular object in writing at this time is to give you my experience in regard to fruit diet. You know that I followed the directions of the little book I lent you quite religiously, before the

birth of Ellis, and I attributed the comparatively easy labor I had to doing so. This time I was so busy moving out to the country, and fruit is so scarce here in the spring, that I did not change my food at all; and, in consequence, I had a very horrible, protracted labor. I think you will be doing a kindness to those of your patients who expect to become mothers, by urging them to persevere in following with care the rules for diet laid down in "Parturition without Pain." Yours very truly, —— ——

Dr. A. Smith, of Geneva, N. Y., says that he has given a copy of the book to all his patients as a guide to living during pregnancy, and with uniformly satisfactory results, except in those cases where there are some idiosyncrasies or pelvic deformities.

Another physician says two of her patients who have followed the directions of the work have found that while they did not altogether escape pain, bearing children was an easy matter compared with the old way.

Another writes: "Your book has been a boon to me. It has done all it promised."

Another, the wife of a very distinguished phy-

sician, says: "I attribute entirely to it the ease with which I bore my first child, though advanced in age and with a narrow pelvis, and also the health of the child."

We might go on quoting from letters received, but it is unnecessary.

We may add that sometimes there is a failure to realize any good. This, however, may be accounted for in many ways. The directions may not be fully carried out. There may be a contracted pelvis. The person may be of such a feeble constitution that she ought not to bear children at all. Such cases are common, and they cannot expect to escape more or less suffering.

The editor sends the eighth edition of his little book on its mission of mercy, with the hope that it will, as heretofore, be warmly welcomed, and do some service for women who have suffered so much to perpetuate the race.

CARE OF CHILDREN.

BY

DR. CLEMENCE S. LOZIER,

DEAN OF THE NEW-YORK MEDICAL COLLEGE FOR WOMEN, ETC.

"LITTLE children are idols of hearts and of households,
They are angels of God in disguise;
His sunlight still sleeps in their tresses,
His glory still gleams in their eyes;
Oh! those truants from home and from heaven,
They have made me more manly and mild,
And I know how Jesus could liken
The kingdom of God to a child."

CHARLES DICKENS.

CARE OF CHILDREN.*

The clothing should be prepared for a new-born infant of fine, soft material. If it be the season requiring woolen flannels, have them of the softest wool and silk mixed. Some mothers line their infants' woolen bands with old soft linen or white silk, which is very nice. In summer, flannel bands should always be lined with linen, fine and soft, or substitute linen instead of flannel for the bands—do not hem them or have seams in them—run the edges or overcast them loosely. Woolen foot-blankets or skirts are always suitable, as our climate is so changeable; but if the tender little feet are reddened and made sensitive by it, by all means shield them with soft linen, cotton, or white silk. Let the napkins be soft linen, with cotton flannel overnapkins, and be sure to avoid the rubber cloth, as it weakens the child by its being too air-tight; any garment impervious to the natural exhalations of the body is debilitating—checking, as it does, transpiration from the cutaneous surface, and preventing

* The author has kindly permitted this excellent essay to appear in this work.

the tonic effect of oxygen or pure air. Those rubber diapers are a curse to infants. Make the garments with as few seams and gathers as possible; never starch infant clothing; many an infant is dosed to death for crying, when, if comfortably dressed, it would never be restless. Perhaps the elegantly ruffled starch shirts and tight arm-holes of its dress and the drawing-string of the neck are its instruments of torture. Old or soft new muslin made into loose-fitting, long-sleeved bed-dresses for the first three months, is most sensible. Few physicians or nurses are thoughtful enough of the sensitive, tender skin of a new-born infant. Its first crying is caused by the exposure of the skin to the atmosphere, and, although it serves the purpose to expand the lungs, is not always needful. Testing this fact, I have many times been careful to shield the infant in a soft, warm covering at birth, and many of my most healthy babes have looked up and breathed freely without crying at all, and always cease crying in a few minutes when covered properly, leaving the face bare, and placing them on the right side with the head and chest a little elevated in good air.

The umbilical cord tied and severed, the child becomes an individual being. The heart and lungs, assuming their final functions, go on to nourish the new being from a different source, namely, the stomach. As soon as the child is washed and dressed.

it should be put to the mother's left breast, which gives the child the position on its right side, favoring the closing of the foramen in the upper part of the heart, through which the arterial circulation was so active before birth, but is now no longer needed; remaining open, this causes a mingling of the venous and arterial blood, giving a bluish color, sometimes spotted, to the skin, and known in common as blue sickness. Infants often die from this cause. The washing of an infant should be done carefully and quickly in quite warm water in a warm room, using only oils or lard of the purest kind, and the warm water. Never use soap of any kind, or nursery powder; the first irritates, the latter closes the pores of the skin; at least for the first three weeks, oil and warm water will cleanse the child better than soap. I have seldom seen a child suffer with sore eyes or red rash over the body since I have disallowed the use of soap. The privates and nates should always be oiled well every time the diaper is changed. The first secretion from the mother's breast is sufficient to move the child's bowels and relieve them of their meconium, or early secretions, if both mother and child are in ordinary health; if not, the best laxative is about one table-spoonful of pleasantly strong elder-blow tea, sweetened with a very little brown sugar or molasses. Give this warm every two hours till it moves the bowels freely, but always wait twenty-four hours before interfering with na-

ture. Of course the midwife or physician will examine and rectify, if any local cause or malformation exist in either the urinary or fecal passages. Then if the child is awkward or refuses to nurse, examine the tongue, and, if a membrane holds it down, cut it with a blunt-pointed scissors, taking care to cut no further than the thin skin or membrane, as just beyond you may cut a small artery which will prove fatal.

Never give your child the rubber nipple nursing-bottle, especially the white rubber, since it contains in its composition the carbonate of lead, which is a sure poison—in some cases slow, but none the less sure—and generally the child will wean itself after sucking the rubber; the food comes so easily from it, and the mouth becomes too tender in a few days to suck the natural nipple. I have watched the effects of the white-rubber nipple for many years; have known cases of spinal curvature—one of complete humpback—often of decayed teeth, innumerable cases of sore mouth, and dysentery or diarrhea, many times causing death; large, indolent boils on the scalp, eruptions behind the ears and in the folds of the neck, in consequence of sucking the rubber nipple. One case of bow-legs, within my observation, was caused by nothing else than by having worn the rubber cloth diaper. All rubber gum-rings and toys should be avoided; indeed, I wish every thing made from the white rubber could

be banished from the nursery. Any baby can be fed at first with a spoon, and in a few weeks it will drink from a cup or small glass. If any artificial nipple is needed, one of silver, glass, or porcelain can be procured. The black rubber may not be so objectionable as the white. I have known a very good artificial nipple to be made of a fine sponge, with cambric linen covering it. A small quill stitched in thoroughly is passed through the centre nearly to the linen cover, and by fitting the sponge over the top of a small-sized bottle it answers a good purpose. The vessels and tubes can scarcely be kept sweet and clean enough for the health of the child, and here is another plea for teaching a child that must be fed to drink its food from a cup or glass. . .

If a mother has health sufficient to mature a living child, she should by all means nurse it from her own breast, where this is possible. Her own health and future happiness require it, and nothing can quite take its place to her infant. Of wet-nurses, not one in ten have pure blood; and then the love of the child develops for its nurse, to say nothing of the low and vicious tempers it may imbibe. Oh! if it could be so that none but willing, loving parents might bear children, what a change we should see! If the mother's nipples are a little tender, which almost always is the case, a good nurse will soon cure them. There are many simples

suitable for different cases. One of the best I have ever used is tincture of myrrh, diluted one half with water; wash the nipple after every attempt to nurse. Many times the nipples are made sore by the white-rubber shield, or nursing-ring of the breast-pump. For the first three to five days, the breasts swell and seem filled with milk, when in fact there is very little milk there; and if the breasts can be covered with silk, which is a non-conductor of electricity, or kept comfortably warm for a few days, this will disappear without the usual drawing and rubbing, which I find often bruises the parts, causing inflammation. The best relief to the breasts is the nursing babe; indeed, any person can draw a breast if one will only be careful to wrap the tongue around the nipple to meet the upper lip.

If there be no alternative, and the babe must be fed, at first give it one tea-spoonful of pure white sugar to half a cup of boiling water; add one tea-spoonful of sweet cream; if cream can not be had, use the upper third of sweet milk, one third milk and two thirds water, first scalding the sugar; we find nurses inclined to make the food too sweet for both mother and child. This food will do for the first three months, if the child is delicate; if any thing stronger seems needed, a little oat-meal or thin barley gruel may take the place of water as above. All new-born infants should be fed at least

every two hours during the day till nine or ten at night, and as seldom as possible after bedtime during the night. A babe must not be left to wake up to be fed or cared for, as healthy infants should sleep nearly all the time till they are three months old. Handled tenderly and put to the breast, or fed, will not disturb them so as to make them wakeful. If the infant's breasts swell or seem hardened, do not pinch or squeeze them; rub gently, and bathe with one drop of belladonna tincture and a few drops of glycerine, and cover with cotton, wool, or white silk, and in a few days it will disappear.

The time of weaning ought to be determined by two circumstances: the health of the nurse, and the development and health of the child. When the nurse is well and the milk abundant, weaning should not take place till the development of the teeth shows that a change of food is required. This is about the eighth or ninth month; but in delicate, feeble children, it should be delayed several months longer—a child should not be weaned during the heat of summer nor suddenly—wean at first during the day, and gradually. If a child is nursed while it sleeps, for a few days, and never when it is awake, it will not grieve or fret about it; be sure to teach it to drink from a cup or small glass. The grand rule for weaning is to accustom the child gradually to the use of other nourishments, and to withdraw the breast from it by equally slow degrees

A nurse should be careful not to breathe in the child's face. The breath exhaled from the lungs is poisonous, and falls like a heavy deadly vapor upon the infant's face as it nurses or sleeps on the arm or same pillow. Every person should sleep alone, if possible, and as soon as a child can be kept warm sleeping alone, it is much better it should sleep in a bed by itself, and without being rocked while sleeping. The habit of talking or chirping to young infants is very wrong; it makes them nervous, and excites the brain too soon; kissing them, especially on the mouth, is most cruel; they breathe lightly enough, and to smother them with kisses and bad breath is a silly, unhealthy habit, and most reprehensible; any baby is worthy to be kissed on its little hand or foot, but none who truly loves a child will kiss it in the face or on the mouth, if they give it a moment's thought. After a child is three months old, its times for food should be every three hours instead of two, and the quantity increased. Some children, from the first, require more in quantity than others, and it is quite impossible to give the exact amount for each child; but it is true that a gluttonous habit may be and often is formed in infancy.

Avoid all alcoholic stimulants as you prize the happiness and well-being of your child. Drunkards are made many times by the unconscious indulgence of mothers. Much of our confectionery is full of

wine and brandy; in this hidden way a desire for alcoholic stimulus is created; and though life may not be shortened by its use, it is rendered a curse to itself and all with whom such a life has influence.

After the babe is washed, the navel cord should be wrapped in soft, dry cloth, as you would roll up a finger, and be turned up and laid on the stomach; place the band on it so as to pin it in front, as you can more easily look at it, and, if needful, place a soft, clean cloth between it and the abdomen. Never oil the cloth, as we wish it to dry and come off as soon as the fourth or fifth day, and oil keeps up too much moisture. If the cord has not been cut before the circulation ceased, it will give you no trouble; but if there has been too much haste in cutting it, leaving it full of blood and still pulsating, the result will generally be a tardy falling-off and a sore place to heal, endangering the comfort if not the health of the child. If properly cut and cared for, all that it needs, after dressing, is a scorched soft linen cloth, smeared with a little mutton-tallow; if sore, a split raisin is very excellent; remove the seeds and apply. The first week of life, a child should not be entirely stripped and washed; it is too fatiguing. It must of course be kept sweet and clean, which can be done gently, piece by piece. A very scientific, successful man-midwife in South-Brooklyn will not allow a new-born infant to be washed and dressed till it is twenty-four hours old.

He oils it well and rolls it in warm, soft wraps, with its face only open, puts it to the breast, and orders it to be kept warm and quiet till the second day, when, if the child is quite vigorous, he allows it to be dressed and handled as the nurse desires; if not quite strong and rested, he sometimes will not subject it to dressing till it is a week old. I have always saved seven months' babies in this way, rolling them in soft linen or silk with cotton wool to keep them warm; wrapping the diaper under the armpits, and a soft covering over the arms. After the first week, they may be dressed and undressed night and morning. Be careful never to wash a child immediately after feeding it, as digestion requires the entire nerve force, which will be called off to react in the skin, leaving the food undigested, causing colic and severe cramps—sometimes sudden death. Always wet the head first in giving a full bath, it will prevent the congestion of the brain, and soothe the child remarkably. Bathe just before feeding or two hours after. If properly administered, a soft, warm-water bath, after oiling, is very refreshing and strengthening.

There are three rules to be observed in dress: The first, equal warmth; second, without ligature; third, as light as possible, consistent with warmth, and the weight suspended from the shoulders. A distinguished physician of Paris declared, just before his death, "I believe that during the twenty

six years that I have practiced my profession in this city, twenty thousand children have been borne to the cemeteries, a sacrifice to the absurd custom of naked arms."

Dr. Warren says, "Boston sacrifices five hundred babies every year by not clothing their arms."

The upper and lower extremities require as much covering as any other part of the body, if not more, since the blood is not so freely circulated in the extremities as in the body. The absurdity of loose, flowing sleeves and wide-spread skirts worn in our changeable climate hardly needs be discussed. In our changeable climate, where the thermometer varies many degrees, not only from day to day, but in different hours of the same day, while the dress of a child should not be at all cumbersome, it should be sufficiently warm to preserve equal temperature to sensitive parts of the body, even upon the warmest days. Short flannel bands should be worn loosely with broad tape shoulder-straps or waist, for the first two years or even three, over the abdomen, for here are located the viscera most affected by diseases which increase summer mortality. A strip of soft muslin, linen, or white silk, can be suspended over the spine and kidneys, if the flannel seems to irritate. Secondly, all ligatures are to be avoided, especially around the tender and expansible bony structures, as the ribs and pelvis. I have seen in post-mortem the lower lobe of the right lung of a

babe five months old, dying suddenly, completely solid or hepatized, in consequence of being pinned too tightly. The young mother in her ignorance thought that as her child was a little girl, she must shape her waist in infancy. She frankly confessed it. Again, by drawing the diaper tightly around the hips of little girls, they become deformed, and often so contracted that in womanhood child-bearing is made difficult if not quite impossible. Nor should long, trailing dresses, that like chain and ball fetter the free movements of the limbs of the child, be tolerated, though they be wickedly imposed by the fashion of the day. The form of the trunk in boys and girls is precisely alike at birth, and not until the absurd ligatures and weighty skirts, bare neck, arms, and legs, make the difference, do we see much, if any, difference in health and vitality. I am obliged to record the fact, drawn from my own observation while abroad, that European women are more sensible in the dress of their children than are our American women, who often run to extremes of vanity and cruel heedlessness or ignorance in this respect. In Paris, in London, and other European cities, I saw great numbers of little children dressed in high-necked dresses, low enough to cover their ankles, and long sleeves, looking sweet, comfortable, and happy. In the Foundling Hospitals, dear, rosy little babies, cunningly dressed like little women, were carried about in the arms of their

nurses How different the picture and the result on this side the Atlantic! Not long since, I saw a dear little girl sitting on the cold stone step of a store on one of the corners of Broadway, dressed in low-necked dress, with almost no sleeves and bright ribbon bows on the shoulders, short, stiff skirts, pretty shoes, and short stockings. The day was blustery and cold; and as I was waiting for an omnibus, I saw the child run up to a man on the corner who was selling fruits, calling him father. He was dressed with close, warm over-coat and thick-soled boots. The contrast was complete between the blue, shriveled, tiny little one and this great, strong, comfortably-dressed father; after a while she ran back again to her cold stone, and, as I took the omnibus, I watched her with prayerful, sad reflections of the unfitness of parents for their trust, and renewed my resolve to do the utmost in my power to change the destructive manner of dress for little girls.

Ligatures obstruct the return of the venous blood to the heart and lungs, which, being retained in the system, causes diseases from congestion and inflammation as well as impurities from carbon. Unless the blood can be freely oxygenated in the lungs, it is unfit for circulation, and gives no life to the body. While the teeth and bony structures are forming, the blood frequently lacks proper nutriment, which should be supplied by such food as contains the phosphates. Wheaten bran contains silex and phos-

phorus, consequently a gruel made of [illegible] third pure milk, taken from the upper third after it has stood still two hours, with a very little, if any, sugar, will be a good diet; or, if the child has the breast, look well to the diet and condition of the mother or nurse.

Children should enjoy the fresh air every day after they are strong enough to be carried out, and the weather is fine.

At all times give them the purest air to breathe; do not cover their faces while sleeping; while draughts or currents of air should be avoided, a child's face should not be covered. At first, when the hair is to be washed, or if it has no hair on its head, it will be well to shield it with the corner of the wrapping blanket or a soft handkerchief till it dries. I am not an advocate of bare heads, yet caps are not good on account of their closeness, and the starch and embroidery with strings under the chin are very objectionable. However, they must be worn, or their substitute, while in the open air. For colic or restlessness give chamomile tincture, two or three drops in a third of a goblet of water; stir well, and give one tea-spoonful every fifteen minutes till relieved; hold the bowl of the tea-spoon in a warm hand after filling it for a few seconds till the chill is taken off.

As the child needs nourishment and clothing to preserve its life and growth, so does it need the

pure nourishment and stimulus of good air, and all the sunshine it can get. Plants grow by these; none the less do our household plants, give them plenty of room and chance for play and muscular activity then.

How many children are rendered cripples for life and become victims of spinal curvature by ignorant, silly mothers keeping them imprisoned in high chairs in babyhood, lest they should soil their beautiful baby-clothes by creeping about on the floor—the paradise of babydom! After play, in-doors or out, should come rest, and usually every child, up to the age of six years, should take a nap or lie down and rest at least one hour before dinner; and in warm weather, should be bathed each time immediately after waking, care being taken to gently rub the spine with the hand or soft towel to strengthen it after the bath.

I must now speak of the effect of the mental emotions on the milk of the nurse. It is a well-known fact that a severe fit of anger will cause the milk to give pain to the babe. All sudden shocks and unpleasant emotions should be carefully avoided by those nursing from the breast. It is woman's crowning glory to be a mother, and the world should so regard it. To quote the words of one, herself a mother, whom the world will long gratefully remember as one of its noblest and best writers and workers, recently deceased—Charlotte I. Lozier,

M.D.: "If woman needs to be versed in all that literature and the sciences can contribute to make her an author or a teacher, then certainly she needs it all when she attempts to inscribe the untouched pages of an unfolding intellect, and teach those first lessons in all sciences or truth which the child's mind probes her own for as soon as it can ask questions." Then the health of the mind so much depends on the structure and health of the body, of which so much depends on the care of the mother. It is said by good physiologists that the brains of children are tender like soft wax, and will not usually retain impressions till they are about seven years old, and that the most efficient scholars are those who have not been taught their alphabet till after that age. I am certain that children should not be forced to apply the memory; still it may and ought to be gently and quietly stored with useful facts. Especially should the child be taught to know truth from falsehood, to respect the rights of others, and become subject to the laws of sympathy and love. As the sculptor moulds the model of clay for the statue by wetting it to soften it, so love softens and moulds the developing child.

Quoting again words from the pen of the last-named author: "If a woman needs culture and expansion, both of her perceptions and conceptions of the beautiful, in order to produce a grand poem or painting or sculpture, or to conceive noble measures

for the relief of the suffering of others, then does she also need all these for that highest of all her efforts, when it seems as if every fibre of her being was put upon the stretch to do its share in the grand donation—to love and to humanity—of a child.'

A LIST

OF

BOOKS ON HEALTH FOR WOMEN.

1. Talks to My Patients. Mrs. R. B. Gleason, M.D. . $1 50
2. Herald of Health. Monthly. M. L. Holbrook, M.D., Editor. $2 a year.
3. Sexual Physiology. Trall..... 2 00
4. Parturition without Pain. Edited by M. L. Holbrook, M.D..... 1 00
5. The Care of Children. C. S. Lozier, M. D..... 25
6. The Management of Infancy. Combe..... 1 50
7. Notes on Nursery. Miss Nightingale..... 1 00
8. The Teeth, and how to save them. Meredith..... 1 25
9. Why not? Storer..... 1 00
10. Insanity in Women. Storer..... 1 50
11. The Transmission of Life. Naphy..... 2 00
12. Physical Life of Woman. Naphy..... 2 00
13. Human Beauty. Brinton and Naphy..... 2 00
14. Hereditary Genius. Galton..... 2 25
15. Our Girls. Dr. Dio Lewis..... 1 50
16. Dalton's Physiology..... 1 50
17. Huxley's Physiology..... 1 50
18. Dress and Care of the Feet..... 1 50
19. Midwifery and Diseases of Women. Shew..... 1 75
20. Management of Children. Shew..... 1 75
21. Body and Mind. Maudsley..... 1 75
22. Physical Perfection. Jaques..... 1 50
23. Uterine Diseases. Trall..... 3 00
24. The Parents' Guide. Pendleton..... 1 50
25. Hydropathic Cook-Book. Trall..... 1 50
26. Hygienic Cook-Book..... 30
27. Advice to a Wife on the Management of her own Health..... 1 25
28. Woman's Home Book of Health. Wilson..... 1 25
29. A Treatise on the Diseases of Females. W. P. Dewees, M. D..... 3 [illegible]

25.B.41
Parturition without pain; a cod1882
Countway Library BET9355
3 2044 046 018 735

25.B.41
Parturition without pain; a cod1882
Countway Library BET9355
3 2044 046 018 735